

EXHIBIT A

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AT&T MOBILITY LLC and AT&T MOBILITY II LLC

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

ENOVSY LLC,

Plaintiff,

vs.

AT&T MOBILITY LLC and AT&T
MOBILITY II LLC,

Defendants.

AT&T MOBILITY LLC and AT&T
MOBILITY II LLC,

Counterclaimants,

vs.

ENOVSY LLC,

Counterdefendant.

Case No.: 2:11-CV-05210-FMO(AGR_x)

**DEFENDANTS' THIRD AMENDED
INVALIDITY CONTENTIONS**

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I. INTRODUCTION

Pursuant to the Patent Rules adopted in this case, Defendants AT&T Mobility LLC and AT&T Mobility II LLC (collectively, “Defendants”) serve these Amended Invalidity Contentions on Plaintiff Enovsys LLC, along with the document production required by Patent Rule 3-4(b).¹ These Amended Invalidity Contentions are based on Defendants’ current understanding of the patents-in-suit, Plaintiff’s Infringement Contentions, and the prior art identified as a result of Defendants’ investigation to date. Defendants continue to investigate and analyze the prior art, and to pursue discovery from Plaintiff and other sources, and may seek leave to further supplement, modify, or otherwise amend these Amended Invalidity Contentions accordingly.

To the extent that these Amended Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Defendants are not proposing any such constructions as proper constructions of those terms or phrases at this time. The Court has established separate deadlines for the parties’ proposed claim constructions, and Defendants will disclose their proposed constructions according to those deadlines. For purposes of these Amended Invalidity Contentions, Defendants may adopt alternative claim construction positions. In particular, certain of these Amended Invalidity Contentions, including the charts attached as Exhibits 1-38, may be based on proposed constructions that appear to underlie Plaintiff’s Infringement Contentions.² Defendants, however, do not concede that Plaintiff’s apparent

¹ Defendants will make available for inspection and copying any item of prior art identified in these Amended Invalidity Contentions that does not appear in the accompanying Patent Rule 3-4(b) document production.

² Plaintiff’s Infringement Contentions appear to be based on an improperly broad interpretation of the Asserted Claims. Thus, certain of these Amended Invalidity Contentions may likewise be based on Plaintiff’s overbroad interpretations.

1 constructions are proper, and reserve the right to contest any such constructions.
2 Moreover, nothing herein admits in any way that any Accused Instrumentality, or
3 any of Defendants' other products or services, infringes any of the Asserted Claims
4 or meets any element, step, or limitation thereof. Pursuant to Patent Rule 3-6,
5 Defendants reserve the right to supplement, modify, or otherwise amend these
6 Amended Invalidity Contentions based on the Court's claim construction ruling or
7 any change in Plaintiff's apparent constructions prior to such ruling, and/or based
8 on the discovery of additional prior art.

9 Throughout the attached Exhibits, Defendants provide examples of where the
10 prior art discloses subject matter recited in claim preambles, without regard to
11 whether the preambles are properly considered to be limitations of the Asserted
12 Claims. Defendants reserve the right to argue that the preambles are or are not
13 limitations. Moreover, Defendants reserve the right to argue that any claim
14 elements or steps recited in the Asserted Claims do not in fact limit the scope of the
15 Asserted Claims.

16 **II. PRIORITY OF THE ASSERTED CLAIMS**

17 In Plaintiff's May 14, 2012 Disclosure of Asserted Claims and Infringement
18 Contentions ("Infringement Contentions"), Plaintiff asserted Claims 1, 6, 10, 11,
19 12, 13, 18, 19, 25, 27, and 28 of U.S. Patent No. 6,560,461 (the "'461 Patent") and
20 Claim 1 of U.S. Patent No. 7,925,273 (the "'273 Patent") (collectively, the
21 "Asserted Claims" of the "Asserted Patents"). The '461 Patent was filed on March
22 8, 1999 and issued on May 6, 2003. The '461 Patent was filed as a continuation-in-
23

24 Further, Plaintiff's Infringement Contentions are deficient at least because they are
25 not in compliance with the Patent Rules adopted by the Court in this case.
26 Defendants reserve the right to supplement, modify, or otherwise amend these
27 Amended Invalidity Contentions should Plaintiff modify its positions regarding the
28 scope of the Asserted Claims, for example, by amending its Infringement
Contentions.

1 part of the application that issued as U.S. Patent No. 5,918,159 (the “‘159 Patent”),
2 which was filed on August 4, 1997. The ‘273 Patent was filed on October 31, 2007
3 as a continuation of the application that issued as the ‘461 Patent. Plaintiff alleged
4 in its Infringement Contentions that the Asserted Claims of both Asserted Patents
5 are entitled to a priority date of August 4, 1997 (*i.e.*, the filing date of the ‘159
6 Patent). Defendants do not agree with Plaintiff’s alleged priority date, however,
7 because the Asserted Claims are not supported by the ‘159 Patent to which they
8 claim priority. Accordingly, these Amended Invalidity Contentions include prior
9 art dated after the filing of the ‘159 Patent but before the filing of the ‘461 Patent,
10 and after the filing of the ‘461 Patent but before the filing of the ‘273 Patent.

11 Moreover, Defendants will object to any attempt by Plaintiff to establish that
12 any Asserted Claim is entitled to a priority date earlier than the August 4, 1997 date
13 identified in its Infringement Contentions. Defendants also reserve the right to
14 supplement, modify, or otherwise amend these Amended Invalidity Contentions
15 should Plaintiff allege that any Asserted Claim is entitled to an earlier priority date.

16 **III. STATE OF THE ART**

17 At the time of the alleged invention of named inventors Mundi Fomukong
18 and Denzil Willoughby Chesney (collectively “Applicants”), selectively reporting
19 and/or updating location information was widely known, understood, and
20 implemented by those of skill in the art. Numerous wireless location technologies
21 were available and were being leveraged by various industries well in advance of
22 Applicants’ alleged invention. Examples of wireless location technologies
23 available at the time include inertial navigation systems, GPS, GLONASS, Loran-
24 C, TACAN, VOR, Omega, and various other ground-based technologies
25 implemented using base stations, such as AM/FM radio towers, TV broadcast
26 towers, and/or cell towers. For example, the use of mobile devices incorporating
27 Global Positioning System technology within a cellular telephone system was
28

1 disclosed prior to the alleged invention of the Asserted Patents at least by U.S.
2 Patent No. 5,235,633. The Federal Aviation Administration (FAA) began
3 leveraging these wireless location technologies for air traffic control and navigation
4 solutions at least as early as 1944.³ By the 1980s, wireless location technology was
5 being leveraged by a number of other industries, including, for example, the
6 automotive industry for the purpose of developing vehicle navigation, fleet
7 management, and intelligent vehicle highway system (IVHS) solutions.⁴

8 The various applications of wireless location technology typically utilized
9 wireless communication capability for transmitting data, such as wirelessly
10 determined locations and/or other related information. Advances in wireless
11 communication technology led to its increased use, ultimately resulting in new
12 applications of wireless location technology. For example, advances in cellular
13 networks in the 1980s and 1990s, such as the development of the Global System for
14 Mobile Communications (GSM) standard⁵, led to an increased use of cellular
15 phones. This resulted in new applications of wireless location technology in
16

17 ³ See “FAA Historical Chronology 1926-1996” at 32 (“In 1944, incorporating
18 wartime radio advances, CAA began testing an improved, static-free, very high
19 frequency omnidirectional radio range (VOR) at its Experimental Station in
20 Indianapolis”); *see also* FAA Advisory Circular 20-101C, “Airworthiness Approval
21 of Omega/VLF Navigation Systems For Use in the U.S. National Airspace System
22 (NAS) and Alaska,” September 12, 1988; FAA Advisory Circular 20-138,
23 “Airworthiness Approval of Global Positioning System (GPS) Navigation
24 Equipment For Use as a VFR and IFR Supplemental Navigation System,” May 25,
25 1994; and FAA Advisory Circular 20-130A, “Airworthiness Approval of
26 Navigation or Flight Management Systems Integrating Multiple Navigation
27 Sensors,” June 14, 1995.

28 ⁴ See, e.g., R.L. French & Associates, “A Comparison of IVHS Progress in the
United States, Europe, and Japan,” IVHS America, December 31, 1993; R.L.
French, “The Evolving Roles of Vehicular Navigation,” 1987.

⁵ See, e.g., GSM Specification 04.08, February 1992.

1 cellular networks, including, for example, cellular directory services⁶, personnel
2 supervision⁷, wireless enhanced 911 (E-911) services⁸, and other location-based
3 services. The use of wireless location technology for these purposes implicated
4 significant concerns regarding privacy.⁹ As a result, those skilled in the art began
5 implementing privacy safeguards for these location-based services. For example, at
6 least as early as 1992, Xerox Corporation began developing a personal digital
7 assistant (PDA), named ParcTab, which included location capabilities.¹⁰ Because
8 privacy was a primary concern in the development of this system, Xerox
9 Corporation implemented functionality to selectively report user locations only
10 when authorized by the particular user.¹¹ The privacy safeguards implemented by

11 ⁶ See, e.g., U.S. Patent No. 5,627,549 to Park; U.S. Patent No. 5,561,704 to
12 Salimando.

13 ⁷ See, e.g., U.S. Patent No. 6,999,779 to Hashimoto.

14 ⁸ In 1994, the FCC proposed various rules requiring cellular service providers to
15 locate emergency 9-1-1 (E-911) callers, and these proposed rules were adopted in
16 1996. See FCC E-911 Notice of Proposed Rule Making, CC Docket No. 94-102,
17 released October 19, 1994; see also FCC E-911 First Report and Order, CC Docket
18 No. 94-102, released July 26, 1996.

19 ⁹ “While clear functional advantages flow from the tracking of user locations in a
20 ubiquitous computing environment, as well as in mobile computing systems in
21 general, the risk of abusive use of this information is sufficiently high to cause
22 some users to fear an unacceptable violation of their personal privacy rights. It,
23 therefore, would be desirable to give users increased control over the scope and
24 distribution of the personal information (*i.e.*, location and identity) that is divulged
25 with respect to them while they are at different locations and/or operating in
26 different contexts. Indeed, it would be beneficial to tailor these disclosures in
27 accordance with the personal preferences of those users who have appropriately
28 registered their particular preferences.” See U.S. Application No. 08/162,522 to
Theimer et al; See also e.g., *COCS '91 Active Badge Panel Including
Teleconference* Video.

¹⁰ See Section IV.D.1 regarding the Xerox ParcTab System.

¹¹ See, e.g., Mike Spreitzer et al., “Architectural Considerations for Scalable,
Secure, Mobile Computing with Location Information,” IEEE Distributed

1 Xerox Corporation included multiple levels of authentication before reporting
 2 location information.¹² Many other similar solutions were developed, as detailed
 3 throughout these Amended Invalidity Contentions.

4 All of these prior art solutions were widely known, understood, and
 5 implemented by those of skill in the art at the time of the alleged invention.
 6 Because these prior art solutions all share the common objectives of efficiently and
 7 reliably determining, reporting, and/or updating location information, it was widely
 8 recognized by those skilled in the art that advances in wireless location and/or
 9 wireless communication technology with respect to a particular prior art solution
 10 were equally applicable to other prior art solutions in the same field.

11 Defendants' Patent Rule 3-4(b) document production includes examples of
 12 prior art evidencing the state of the art at the time of the alleged invention. Each of
 13 those prior art references qualifies as prior art at least under 35 U.S.C. §§ 102(a),
 14 (b), and/or (e) and invalidates the Asserted Claims and/or renders them obvious.

15 **IV. THE ASSERTED CLAIMS ARE INVALID BASED ON THE PRIOR** 16 **ART [P.R. 3-3(A), (B), AND (C)]**

17 Pursuant to subsections (a), (b), and (c) of Patent Rule 3-3, Defendants
 18 contend that the Asserted Claims are invalid as anticipated by the prior art under 35
 19 U.S.C. § 102 and/or as obvious in view of the prior art under 35 U.S.C. § 103. The
 20 charts attached as Exhibits 1-38 provide examples of where specific items of prior
 21 art disclose either expressly or inherently, and/or render obvious, each element,
 22 step, or limitation of the Asserted Claims. Accompanying Exhibits 1-38 are

23
 24 Computing Systems Conference, June 21-24, 1994 at 31 ("In this section we will
 25 introduce a variety of modifications to our architecture in support of the provision
 26 of privacy. ... [W]e define privacy to mean that information about a person's
 location remains known only to that person unless he explicitly hands it out to
 someone else."); *see also* Section IV.D.1.

27 ¹² *See* Section IV.D.1.
 28

1 Appendices A-R that provide supplemental examples of prior art disclosing certain
2 claim elements, steps, or limitations that were ubiquitous in the prior art (as
3 discussed in Exhibits 1-38). Defendants have endeavored to cite the most relevant
4 portions of the identified prior art. However, other portions of the identified prior
5 art may additionally disclose, either expressly or inherently, and/or render obvious,
6 one or more elements, steps, or limitations of the Asserted Claims. Although
7 Defendants have endeavored to identify at least one citation per element for each
8 item of prior art, each and every disclosure of the same element in an item of prior
9 art is not necessarily identified. The lack of a citation for an element, step, or
10 limitation is not an admission that the element, step, or limitation is not disclosed
11 expressly or inherently in, and/or is not rendered obvious by, the item of prior art.
12 In an effort to focus the issues, Defendants have identified only example portions or
13 aspects of cited prior art. Defendants reserve the right to rely on uncited portions or
14 aspects of the identified prior art to establish the invalidity of the Asserted Claims.
15 Moreover, Defendants reserve the right to rely on uncited portions or aspects of the
16 identified prior art, other prior art, other references that show the state of the art
17 (irrespective of whether such references themselves qualify as prior art), and/or
18 expert testimony to provide context to or aid in understanding the cited portions or
19 aspects of the identified prior art.

20 Where Defendants cite to a particular drawing or figure in the accompanying
21 charts, the citation encompasses the description of the drawing or figure, as well as
22 any text associated with the drawing or figure. Similarly, where Defendants cite to
23 particular text concerning a drawing or figure, the citation encompasses that
24 drawing or figure as well.

25 Although certain references are listed as evidence for particular prior art
26 solutions, certain of those references describe, relate to, and are evidence of
27 multiple prior art solutions that render the Asserted Claims invalid. Defendants
28 reserve the right to rely on any identified reference as evidence supporting any of

1 those relevant prior art solutions. Defendants also reserve the right to rely on any
2 identified item of prior art individually to anticipate any or all of the Asserted
3 Claims and/or to render obvious any or all of the Asserted Claims in view of the
4 knowledge of one of skill in the art and/or in combination with other identified
5 references.

6 To the extent these Amended Invalidity Contentions identify any prior art
7 patents and/or printed publications under 35 U.S.C. §§ 102(a) or (b), Defendants
8 may also rely on those patents and/or printed publications as evidence that the
9 described invention was known or used by others under 35 U.S.C. §§ 102(a) or
10 (g)(2), or in public use or on sale under 35 U.S.C. § 102(b).

11 Certain items of identified prior art inherently disclose features of the
12 Asserted Claims. Defendants reserve the right to rely on inherency to demonstrate
13 the invalidity of the Asserted Claims. Moreover, certain prior art references and
14 solutions may inherently disclose certain features of the Asserted Claims as
15 apparently construed by Plaintiff. Defendants may rely on cited or uncited portions
16 of the prior art, other documents, and expert testimony to establish the inherency of
17 certain features of the prior art to invalidate the Asserted Claims.

18 Defendants also reserve the right to rely on any reference identified in these
19 Amended Invalidity Contentions or any other reference to prove that an item of
20 prior art identified herein is enabled or enabling, or to explain the meaning of a
21 term or phrase used in or other disclosure found in the item of prior art.

22 In addition to the prior art identified below and the accompanying invalidity
23 claim charts, Defendants also rely on the “Background of the Invention” and other
24 relevant portions of the Asserted Patents and their related patents; the file histories
25 of the Asserted Patents and their related patents, including the references cited
26 during prosecution; and other evidence, including fact and expert testimony about
27 that evidence, to prove that the Asserted Claims are anticipated and/or rendered
28 obvious under 35 U.S.C. §§ 102 and 103.

1 Defendants reserve the right to supplement, modify, or otherwise amend
2 these Amended Invalidity Contentions in response to any allegation by Plaintiff that
3 any of the identified prior art, or any combination of that prior art, does not disclose
4 one or more elements, steps, or limitations of the Asserted Claims.

5 **A. Obviousness Combinations Under 35 U.S.C. § 103**

6 To the extent that Plaintiff argues that an item of prior art does not disclose
7 an element, step, or limitation, Defendants reserve the right to rely on any
8 combination of the prior art disclosed in these Amended Invalidity Contentions,
9 including the charts attached as Exhibits 1-38, the knowledge of those skilled in the
10 art, the Applicants' admitted prior art, and/or other prior art or information to show
11 that it would have been obvious to include the allegedly missing element, step, or
12 limitation. The reasons or motivation to combine the prior art would include, for
13 example, the fact that the prior art is all in the field of wireless location and/or
14 wireless communication technology, and one of ordinary skill in the art
15 implementing a system to wirelessly determine, report, and/or update location
16 information would have been motivated to investigate the various existing products,
17 systems, solutions, methods, processes, patents, patent applications, and/or
18 publications in that field to address his particular needs. The combinations and
19 modifications of the prior art to invalidate the Asserted Claims would have arisen
20 from ordinary innovation, ordinary skill, or common sense, or would have been
21 obvious to try or otherwise predictable.

22 A person of ordinary skill would have been motivated to combine or modify
23 identified prior art based on the nature of the problem to be solved, the teachings of
24 the prior art, and the knowledge of persons of ordinary skill in the art. Design
25 incentives and other market forces would have prompted those combinations and
26 modifications. For example, in the prior art, there were well-recognized design
27 needs and market pressures to efficiently and reliably determine, report, and/or
28

1 update location information. In addition, there were well-recognized design needs
2 and market pressures to implement safeguards for maintaining the privacy of the
3 subject of the location information. Moreover, some items of prior art refer to or
4 discuss other items of prior art, illustrating the close technical and other
5 relationships among the prior art and among those of skill in the art. To the extent
6 any item of prior art refers to or discusses other items of prior art, either expressly
7 or inherently, it would have been obvious to combine those items of prior art for at
8 least that reason.

9 Defendants contend that the Asserted Claims are obvious because they
10 merely arrange old elements, with each performing the same function that had been
11 known, to perform and yield no more than what one of ordinary skill would expect
12 from such an arrangement. Because there were a finite number of predictable
13 solutions in the art of wirelessly determining, reporting, and/or updating location
14 information, it would have been obvious to a person of ordinary skill in the art to
15 pursue the known options. A person skilled in the art of wireless location and/or
16 wireless communication technology would have been familiar with all of the claim
17 elements, steps, and/or limitations that the patentee used to distinguish the prior art
18 during prosecution. The identified prior art uses those familiar elements for their
19 primary or well-known purposes and in a manner within the ordinary level of skill
20 in the art. Accordingly, common sense and the knowledge of the prior art attributed
21 to those skilled in the art render the Asserted Claims invalid as well.

22 As discussed above in Section III with respect to the state of the art,
23 selectively reporting and/or updating location information was well-known to those
24 of skill in the art at the time of alleged invention. One of ordinary skill in the art
25 would have found it obvious to combine and/or modify prior art involving selective
26 reporting and/or updating of location information with concepts from other prior art
27 in the field of wireless location and/or wireless communication technology.
28

1 Various additional example combinations and modifications, and reasons or
 2 motivation to implement those combinations and modifications, are provided
 3 below.

4 **B. Applicants' Admitted Prior Art**

5 Statements made by the Applicants in the specification and/or during
 6 prosecution of the Asserted Patents and their related patents and/or applications,
 7 such as in the "Background of the Invention" section that describes the prior art
 8 known to the Applicants, are admissions that can be relied upon for both
 9 anticipation and obviousness determinations, regardless of whether the admitted
 10 prior art would otherwise qualify as prior art under the statutory categories set forth
 11 in 35 U.S.C. § 102. See MPEP §§ 608.01(c), 2129. To the extent Plaintiff
 12 contends that the Asserted Claims are not invalid as anticipated by and/or obvious
 13 in view of the prior art under 35 U.S.C. §§ 102 and 103, Defendants reserve the
 14 right to rely on such "Admitted Prior Art" to demonstrate the invalidity of the
 15 Asserted Claims.

16 For example, in the specification and prosecution history of the Asserted
 17 Patents and the related '159 Patent, Applicants admit that at least the following
 18 were known in the art:

- 19 • The use of the Global Positioning System to determine the location of
 20 a mobile remote receiving unit. *See, e.g.*, '461 Patent, 6:13-15.
- 21 • Systems that allow subscribers to control the provision of positioning
 22 information to callers. *See, e.g.*, '159 Patent, 1:53-60.
- 23 • Receiving a request to provide location information of a mobile remote
 24 unit to an authorized (and pre-authorized) resource, as taught by U.S.
 25 Patent No. 5,731,785 to Lemelson et al. *See, e.g.*, '461 Patent
 Prosecution History, Response filed 6/24/2001 at 13; '273 Patent
 Prosecution History, Response filed 8/24/2010 at 2.
- 26 • Mobile remote units that report their location at pre-determined time
 27 intervals, as taught by U.S. Patent No. 5,943,621 to Ho et al. *See, e.g.*,
 28 '273 Patent Prosecution History, Response filed 8/24/2010 at 6.

- 1 • Satellite based paging communication systems comprising space
2 satellites, ground base stations, and call receivers having a means to
3 receive paging information from satellites and earth based
4 communication means, as taught by U.S. Patent No 5,301,354 to
5 Schwendeman et al. *See, e.g.*, ‘461 Patent Prosecution History, IDS
6 filed 3/8/1999 at 1; ‘159 Patent Prosecution History, Response filed
7 8/4/1997 at 3.
- 8 • Satellite paging systems with satellite transmitters, as taught by U.S.
9 Patent No. 5,506,886 to Maine et al. *See, e.g.*, ‘461 Patent Prosecution
10 History, IDS filed 3/8/1999 at 1; ‘159 Patent Prosecution History,
11 Response filed 9/16/1998 at 6.
- 12 • No outage GPS/AM position finding systems for cellular networks, as
13 taught by U.S. Patent No. 5,422,813 to Schuchman et al. *See, e.g.*,
14 ‘461 Patent Prosecution History, IDS filed 3/8/1999 at 1; ‘159 Patent
15 Prosecution History, Response filed 9/16/1998 at 6.
- 16 • RF communication systems with mobile RF source communication
17 units that poll for the location of mobile RF target communication
18 units, as taught by U.S. Patent No. 5,126,733 to Sager et al. *See, e.g.*,
19 ‘461 Patent Prosecution History, IDS filed 3/8/1999 at 1; ‘159 Patent
20 Prosecution History, Response filed 9/16/1998 at 14.
- 21 • Methods for determining and reporting the location of missing vehicles
22 using cellular telephones in the vehicles that receive interrogation
23 signals requesting location information. *See, e.g.*, ‘461 Patent
24 Prosecution History, Response filed 6/4/2000 at 6.

25 Additional admissions regarding the prior art are found in the specification
26 and prosecution history of the Asserted Patents, in their related patents and/or
27 applications, in Plaintiff’s Infringement Contentions, and in testimony given by the
28 inventors or Plaintiff in the course of litigating of one or more of the Asserted
Patents. For example, Plaintiff admits that U.S. Patent No. 5,235,633 discusses a
block diagram of a mobile unit of a cellular telephone system which incorporates a
GPS location determining system.¹³ As another example, Plaintiff admits that GPS

¹³ Deposition of Mundi Fomukong taken on Wednesday, August 28, 2013 at p. 108, ll. 6-13.

1 technology was used to position aircraft at least as early as 1991.¹⁴ Defendants
2 reserve the right to rely on such Admitted Prior Art to demonstrate the invalidity of
3 the Asserted Claims.

4 **C. The Knowledge of One of Ordinary Skill in the Art**

5 To the extent that Plaintiff contends that any particular feature of the
6 Asserted Claims is a novel aspect of the Asserted Claims, Defendants reserve the
7 right to illustrate that the particular feature was widely known, understood, and
8 implemented by those of ordinary skill in the art at the time of the alleged
9 invention, and that it would have been obvious to combine and/or modify the prior
10 art identified throughout these Amended Invalidity Contentions with the knowledge
11 of one of ordinary skill in the art. For example, to the extent Plaintiff contends that
12 selectively reporting and/or updating location information is a novel aspect of the
13 Asserted Claims, various prior art systems and references, including those
14 discussed throughout these Amended Invalidity Contentions, demonstrate that
15 selectively reporting and/or updating location information was widely known,
16 understood, and implemented in the prior art. One of ordinary skill in the art would
17 have known this at the time of the alleged invention.

18 Defendants reserve the right to illustrate this knowledge using any of the
19 prior art references included as part of Defendants' Patent Rule 3-4(b) document
20 production. Defendants also reserve the right to contend that it would have been
21 obvious to modify any of the prior art identified in these Amended Invalidity
22 Contentions to render the Asserted Claims invalid in view of the knowledge of one
23 of ordinary skill in the art.
24
25
26

27 ¹⁴ Deposition of Mundi Fomukong taken on Wednesday, August 28, 2013 at p. 104, ll. 1-15.
28

D. The Asserted Claims of the '461 Patent are Invalid Based on the Prior Art

1. The Xerox ParcTab System

The Xerox ParcTab System, which includes the Active Badge technologies, qualifies as prior art at least under 35 U.S.C. §§ 102(a) and (g)(2) because it was known and/or used by others or made by others before the earliest conception date that Plaintiff can establish for the Asserted Claims, and under 35 U.S.C. § 102(b) because it was in public use and/or offered for sale more than one year prior to the alleged priority date of the Asserted Patents.¹⁵ In addition, the Xerox ParcTab System was built and publicly used at least at the Xerox Palo Alto Research Center, Olivetti Research Limited in Cambridge, EuroPARC in Cambridge, the University of Cambridge, the University of Washington, and the Massachusetts Institute of Technology. Each of these systems qualify as prior art at least under 35 U.S.C. §§ 102(a) and 102(g)(2).

Various references, including those identified below, disclose the features and functionalities of the Xerox ParcTab System. Each underlying reference evidencing the Xerox ParcTab System also individually qualifies as prior art. Exhibits 1-5, 23 and 37 provide examples of how the Xerox ParcTab System and associated references disclose, either expressly or inherently, each element of the Asserted Claims, thereby anticipating those claims under 35 U.S.C. § 102, using

¹⁵ See e.g. *Big Brother Pinned to your Chest*, Business Week, August 17, 1992; *The Office of the 21st Century*, Palo Alto Weekly Vol. XIII, Number 32, May 6, 1992; *Total Recall*, Popular Science February 1995; *Locating systems at work: implications for the development of active badge applications*, Interacting with Computers vol. 4 no. 3, 1992; *Locator Technology in Distributed Systems: The Active Badge Panels*, Conference on Organizational Computer Systems 1991-11-06; *The Boss That Never Blinks*, San Jose Mercury News, 8 March 1992; *More on active badges and fears about loss of privacy*, InfoWorld Vol 14 Issue 27, July 6, 1992; *'Active Badges' Play Follow the Worker; Computerized Trackers Spark Worries about 'Big Brother'*, The Washington Post Sec. A01, October 8, 1992; *Playground of Invention*, San Francisco Examiner Sec. B1, September 15, 1995; *We're going to have computers coming out of the woodwork*, Smithsonian, Vol. 25 Issue 6, September 1, 1994; and 22 July 2013 deposition of Dr. Roy Want.

Plaintiff's apparent and overbroad constructions of the claims. The following references evidence the Xerox ParcTab System:

Exh.	EVIDENCE FOR THE PRIOR ART XEROX PARCTAB SYSTEM
1	The Xerox ParcTab System
1	Mike Spreitzer et al., "Providing Location Information in a Ubiquitous Computing Environment," SOSP '93 Proceedings of the Fourteenth ACM Symposium on Operating System Principles, 1993 (the "Spreitzer Article II"). The Spreitzer Article II qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
1	Roy Want et al., "The Active Badge Location System," ACM Transactions on Information Systems, Vol. 10, Issue 1, January 1992 (the "Want Article I"). The Want Article I qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
1	Roy Want et al., "An Overview of the ParcTab Ubiquitous Computing Experiment," IEEE Personal Communications, December 1995 (the "Want Article II"). The Want Article II qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
1	Bill Schilit et al., "The ParcTab Mobile Computing System," Proceedings of the Fourth Workshop on Workstation Operating Systems, 1993 (the "Schilit Article I"). The Schilit Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
1	R.H. Harper et al., "Locating systems at work: implications for the development of active badge applications," Interacting with Computers vol 4 no 3, 1992 (the "Harper Article"). The Harper Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
1	Mark Weiser., "Some Computer Science Issues in Ubiquitous Computing," Communications of the ACM Vol. 36 No. 7, 1993 (the "Weiser Article"). The Weiser Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).

Exh.	EVIDENCE FOR THE PRIOR ART XEROX PARCTAB SYSTEM
2	U.S. Patent No. 5,493,692 to Theimer et al., entitled “Selective Delivery of Electronic Messages in a Multiple Computer System Based on Context and Environment of a User,” issued February 20, 1996 (the “Theimer Patent”). The Theimer Patent is entitled to a priority date of at least December 3, 1993. The Theimer Patent qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
3	U.S. Application Serial No. 08/162,522 to Theimer et al., entitled “Personal Privacy for Mobile Users in Distributed Computing Environments That Support Location Sensitive Applications,” filed December 3, 1993 (the “Theimer Application”). The Theimer Application, which was cited in the Theimer Patent, qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b). <i>See</i> MPEP § 901.02.
4	U.S. Patent No. 5,564,070 to Want et al., entitled “Method and System for Maintaining Processing Continuity to Mobile Computers in a Wireless Network,” issued October 8, 1996 (the “Want Patent”). The Want Patent is entitled to a priority date of at least July 30, 1993. The Want Patent qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
5	Mike Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile Computing with Location Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994 (the “Spreitzer Article I”). The Spreitzer Article I qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
23	Andy Harter et al., “A Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1, 1994 (the “Harter Article”). The Harter Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	Roy Want et al., “Active Badges and Personal Interactive Computing Objects,” IEEE Transactions on Consumer Electronics, Vol. 38, No. 1, February 1992 (the “Want Article III”). The Want Article III qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	Active Badge Installation and User’s Guide (Draft) [On information and belief, AT&T identifies the publication date no later than 1996. AT&T will immediately notify Enovsys when AT&T confirms the publication date of this reference.]

Exh.	EVIDENCE FOR THE PRIOR ART XEROX PARCTAB SYSTEM
37	Bill Schilit et al., “Customizing Mobile Applications,” Proceedings USENIX Symposium on Mobile & Location-independent Computing, August 1993 (the “Schilit Article II”). The Schilit Article II qualifies as prior art under at least 35 U.S.C. § 103.
37	Roy Want et al., “ParcTab System version 7.0 release notes,” April 18, 1994 (the “Want Article IV”). The Want Article IV qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	George Fitzmaurice, et al., “MultiTab Architecture,” June 28, 1993 (the “Fitzmaurice Article”). The Fitzmaurice Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	Rich Gold, “Preliminary Definition of Parc+ Tab Applications”, July 13, 1991 (the “Gold Article”). The Gold Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	Michael Tso, “tab/doc/rep7-19”, July 19, 1991 (the “Tso Article”). The tso Article qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
37	Marvin Theimer et al., “Delegation through Access Control Programs,” CSL-92-12, November 1992 (the “Theimer Article”). The Theimer Article qualifies as prior art under at least 35 U.S.C. § 103.
39	22 June 2013 deposition testimony of Dr. Roy Want

Defendants reserve the right to contend that the references evidencing the Xerox ParcTab System constitute a single reference for purposes of anticipation. Defendants also reserve the right to contend that, if the Xerox ParcTab System references are considered individually, it would have been obvious to combine those references to render the Asserted Claims invalid, because those references, or the information contained therein, all discuss the same subject (*i.e.*, the Xerox ParcTab System).

To the extent any of the references evidencing the Xerox ParcTab System disclose a particular feature, it would have been obvious to combine that feature with other or all of the references evidencing the Xerox ParcTab System to render

1 the Asserted Claims invalid.¹⁶ The reasons or motivation to modify the references
 2 evidencing the Xerox ParcTab System in that manner include, for example, the fact
 3 that it would have been common sense to apply concepts that were already being
 4 described in one reference about the Xerox ParcTab System to another reference
 5 about the same solution.

6 To the extent Plaintiff asserts that the Xerox ParcTab System, or any
 7 reference evidencing the Xerox ParcTab System, does not anticipate the Asserted
 8 Claims, it would also have been obvious to combine or modify the Xerox ParcTab
 9 System, or any reference evidencing the Xerox ParcTab System, with concepts
 10 from other prior art such as, for example, other prior art identified in Section IV
 11 and/or Appendices A-R, to render the Asserted Claims invalid, because all of that
 12 prior art relates to wireless location and/or wireless communication technology.

13 For example, it would have been obvious to combine or modify the Xerox
 14 ParcTab System, or any reference evidencing that system, to receive a request for
 15 location information, as described by the prior art from Appendix A, including, for
 16 example, U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to
 17 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
 18 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S.
 19 Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.;
 20 U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis
 21 et al.; U.S. Patent No. 5,625,668 to Loomis et al.; U.S. Patent No. 6,486,794 to
 22 Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Application Serial

23 ¹⁶ See e.g. Norman Adams email sent 19 November 1994 describing the ParcTab system and
 24 stating “But, our system is upward compatible with a system that give users control over location
 25 information about them. That system is described by two PARC researchers in [‘Providing
 26 Location Information in a Ubiquitous Computing Environment,’ SOSP ’93 Proceedings of the
 27 Fourteenth ACM Symposium on Operating System Principles, 1993].”; See also 22 July 2013
 28 Deposition of Dr. Roy Want at: pg. 30 ll. 13-22; pg. 86 l. 12 - pg. 87 l. 8; pg. 92 l. 21 - pg. 93 l.
 10; pg. 148 l. 9 - pg. 150 l. 5; pg. 152 l. 1 - pg. 154 l. 19; pg. 170 ll. 6-20; pg. 184 l. 7 - pg. 185 l. 5;
 and pg. 198 l. 20 - pg. 201 l. 22; pg. 259 l. 14 - pg. 260 l. 18.

1 No. 08/162,522 to Theimer et al.; International PCT Application No.
2 PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to Michihiro;
3 and Mike Spreitzer et al., “Architectural Considerations for Scalable, Secure,
4 Mobile Computing with Location Information,” IEEE Distributed Computing
5 Systems Conference, June 21-24, 1994. One of ordinary skill in the art would have
6 been motivated to combine or modify the Xerox ParcTab System in this manner for
7 the reasons explained in Section IV.A and also because the Xerox ParcTab System
8 and the above-referenced prior art from Appendix A are all directed towards
9 wireless location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Xerox ParcTab System, or any reference evidencing that system, to identify the
12 source of a location request, as described by the prior art from Appendix B,
13 including, for example, U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent
14 No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S.
15 Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
16 U.S. Application Serial No. 08/162,522 to Theimer et al.; JP Patent Publication No.
17 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural Considerations
18 for Scalable, Secure, Mobile Computing with Location Information,” IEEE
19 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
20 skill in the art would have been motivated to combine or modify the Xerox ParcTab
21 System in this manner for the reasons explained in Section IV.A and also because
22 the Xerox ParcTab System and the above-referenced prior art from Appendix B are
23 all directed towards wireless location determining and/or reporting technology.

24 As another example, it would have been obvious to combine or modify the
25 Xerox ParcTab System, or any reference evidencing that system, to transmit a
26 location request and the identification of the source of the request to a mobile unit
27 and to receive authorization from the mobile unit to allow or deny the request, as
28 described by the prior art from Appendix C, including, for example, U.S. Patent

1 No. 6,442,391 to Johansson et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
2 International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP Patent
3 Publication No. 6189359A to Michihiro. One of ordinary skill in the art would
4 have been motivated to combine or modify the Xerox ParcTab System in this
5 manner for the reasons explained in Section IV.A and also because the Xerox
6 ParcTab System and the above-referenced prior art from Appendix C are all
7 directed towards wireless location determining and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Xerox ParcTab System, or any reference evidencing that system, to use the methods
10 of authentication described by the prior art from Appendix D, including, for
11 example, The ATIS Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No.
12 6,169,902 to Kawamoto; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
13 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
14 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et
15 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
16 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
17 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
18 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
19 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
20 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
21 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural
22 Considerations for Scalable, Secure, Mobile Computing with Location
23 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.
24 One of ordinary skill in the art would have been motivated to combine or modify
25 the Xerox ParcTab System in this manner for the reasons explained in Section IV.A
26 and also because the Xerox ParcTab System and the above-referenced prior art
27 from Appendix D are all directed towards wireless location determining and/or
28 reporting technology.

1 As another example, it would have been obvious to combine or modify the
2 Xerox ParcTab System, or any reference evidencing that system, to allow location
3 requests from some resources while denying location requests from other resource,
4 as described by the prior art from Appendix E, including, for example, The ATIS
5 Solution; U.S. Patent No. 5,950,137; Andy Harter et al., "A Distributed Location
6 System for the Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No.
7 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
8 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
9 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,493,692 to
10 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial
11 No. 08/162,522 to Theimer et al.; and Mike Spreitzer et al., "Architectural
12 Considerations for Scalable, Secure, Mobile Computing with Location
13 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.
14 One of ordinary skill in the art would have been motivated to combine or modify
15 the Xerox ParcTab System in this manner for the reasons explained in Section IV.A
16 and also because the Xerox ParcTab System and the above-referenced prior art
17 from Appendix E are all directed towards wireless location determining and/or
18 reporting technology.

19 As another example, it would have been obvious to combine or modify the
20 Xerox ParcTab System, or any reference evidencing that system, to use a profile to
21 allow or deny a request for location information, as described by the prior art from
22 Appendix F, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137
23 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; Andy Harter et al., "A Distributed
24 Location System for the Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S.
25 Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et
26 al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer
27 et al.; and U.S. Patent No. 6,360,102 to Havinis et al. One of ordinary skill in the
28 art would have been motivated to combine or modify the Xerox ParcTab System in

1 this manner for the reasons explained in Section IV.A and also because the Xerox
2 ParcTab System and the above-referenced prior art from Appendix F are all
3 directed towards wireless location determining and/or reporting technology.

4 As another example, it would have been obvious to combine or modify the
5 Xerox ParcTab System, or any reference evidencing that system, to continuously
6 track the location of a mobile unit, as described by the prior art from Appendix G,
7 including, for example, U.S. Patent No. 6,169,902; Andy Harter et al., “A
8 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
9 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to
10 Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692
11 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No.
12 5,365,451 to Wang et al.; and International PCT Application No. PCT/US97/11656
13 to Boltz et al. One of ordinary skill in the art would have been motivated to
14 combine or modify the Xerox ParcTab System in this manner for the reasons
15 explained in Section IV.A and also because the Xerox ParcTab System and the
16 above-referenced prior art from Appendix G are all directed towards wireless
17 location determining and/or reporting technology.

18 As another example, it would have been obvious to combine or modify the
19 Xerox ParcTab System, or any reference evidencing that system, to detect an
20 absence of communication with a mobile unit, as described by the prior art from
21 Appendix H, including, for example, The ATIS Solution; U.S. Patent No.
22 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent
23 No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S.
24 Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.;
25 International PCT Application No. PCT/US97/11656 to Boltz et al.; the GSM
26 Specification; the TIA/EIA/IS-95-A Specification; M. Mouly, et al., “The GSM
27 System for Mobile Communications”; Roy Want et al., “The Active Badge
28 Location System,” ACM Transactions on Information Systems, Vol. 10, Issue 1,

1 January 1992; Roy Want et al., “An Overview of the ParcTab Ubiquitous
2 Computing Experiment,” IEEE Personal Communications, December 1995; and JP
3 Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill in the art
4 would have been motivated to combine or modify the Xerox ParcTab System in
5 this manner for the reasons explained in Section IV.A and also because the Xerox
6 ParcTab System and the above-referenced prior art from Appendix H are all
7 directed towards wireless location determining and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Xerox ParcTab System, or any reference evidencing that system, to have a network
10 node allow or deny a request for location information, as described by the prior art
11 from Appendix I, including, for example, The ATIS Solution; U.S. Patent No.
12 6,169,902 to Kawamoto; U.S. Patent No. 5,950,137 to Kim; Andy Harter et al., “A
13 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
14 1994; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
15 Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Application
16 Serial No. 08/162,522 to Theimer et al.; International PCT Application No.
17 PCT/US97/11656 to Boltz et al.; and JP Patent Publication No. 6189359A to
18 Michihiro. One of ordinary skill in the art would have been motivated to combine
19 or modify the Xerox ParcTab System in this manner for the reasons explained in
20 Section IV.A and also because the Xerox ParcTab System and the above-referenced
21 prior art from Appendix I are all directed towards wireless location determining
22 and/or reporting technology.

23 As another example, it would have been obvious to combine or modify the
24 Xerox ParcTab System, or any reference evidencing that system, to have a mobile
25 unit allow or deny a request for location information, as described by the prior art
26 from Appendix J, including, for example, U.S. Patent No. 6,442,391 to Johansson
27 et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,360,102 to
28 Havinis et al.; JP Patent Publication No. 6189359A to Michihiro; and JP Patent

1 Publication No. 9147291A to Yoshiyuki. One of ordinary skill in the art would
2 have been motivated to combine or modify the Xerox ParcTab System in this
3 manner for the reasons explained in Section IV.A and also because the Xerox
4 ParcTab System and the above-referenced prior art from Appendix J are all directed
5 towards wireless location determining and/or reporting technology.

6 As another example, it would have been obvious to combine or modify the
7 Xerox ParcTab System, or any reference evidencing that system, to obtain the
8 identification of a mobile unit whose location has been requested, as described by
9 the prior art from Appendix K, including, for example, U.S. Patent No. 5,963,866
10 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No.
11 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S.
12 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.;
13 U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et
14 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
15 Publication No. 6189359A to Michihiro; Mike Spreitzer et al., "Architectural
16 Considerations for Scalable, Secure, Mobile Computing with Location
17 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994;
18 and the GSM Specification. One of ordinary skill in the art would have been
19 motivated to combine or modify the Xerox ParcTab System in this manner for the
20 reasons explained in Section IV.A and also because the Xerox ParcTab System and
21 the above-referenced prior art from Appendix K are all directed towards wireless
22 location determining and/or reporting technology.

23 As another example, it would have been obvious to combine or modify the
24 Xerox ParcTab System, or any reference evidencing that system, to forward
25 information regarding whether to allow or deny a location request from a first node
26 to a second node, as described by the prior art from Appendix L, including, for
27 example, The ATIS Solution; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
28 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et

1 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,493,692 to
2 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication
3 No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
4 Considerations for Scalable, Secure, Mobile Computing with Location
5 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
6 One of ordinary skill in the art would have been motivated to combine or modify
7 the Xerox ParcTab System in this manner for the reasons explained in Section IV.A
8 and also because the Xerox ParcTab System and the above-referenced prior art
9 from Appendix L are all directed towards wireless location determining and/or
10 reporting technology.

11 As another example, it would have been obvious to apply or modify the
12 Xerox ParcTab System, or any reference evidencing that system, to operate with a
13 variety of mobile remote units, as described by the prior art from Appendix Q,
14 including, for example, The ATIS Solution; U.S. Patent No. 5,946,626 to Foladare
15 et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; Mike Spreitzer et al.,
16 “Providing Location Information in a Ubiquitous Computing Environment,” SOSP
17 ’93 Proceedings of the Fourteenth ACM Symposium on Operating System
18 Principles, 1993; Roy Want et al., “The Active Badge Location System,” ACM
19 Transactions on Information Systems, Vol. 10, Issue 1, January 1992; Roy Want et
20 al., “An Overview of the ParcTab Ubiquitous Computing Experiment,” IEEE
21 Personal Communications, December 1995; U.S. Patent No. 5,493,692 to Theimer
22 et al., entitled “Selective Delivery of Electronic Messages in a Multiple Computer
23 System Based on Context and Environment of a User,” issued February 20, 1996;
24 U.S. Application Serial No. 08/162,522 to Theimer et al., entitled “Personal Privacy
25 for Mobile Users in Distributed Computing Environments That Support Location
26 Sensitive Applications,” filed December 3, 1993; and U.S. Patent No. 5,564,070 to
27 Want et al., entitled “Method and System for Maintaining Processing Continuity to
28 Mobile Computers in a Wireless Network,” issued October 8, 1996. One of

1 ordinary skill in the art would have been motivated to combine or modify the Xerox
2 ParcTab System in this manner for the reasons explained in Section IV.A and also
3 because the Xerox ParcTab System and the above-referenced prior art from
4 Appendix Q are all directed towards wireless location determining and/or reporting
5 technology.

6 One of ordinary skill in the art would not have limited himself when making
7 modifications to the Xerox ParcTab System to concepts solely implemented in or
8 discussed with reference to the Xerox ParcTab System. Rather, one of ordinary
9 skill also would have considered the concepts from other wireless location and/or
10 wireless communication solutions of the time. This would have been a result of
11 ordinary innovation, ordinary skill, and common sense and would have been
12 obvious to try and predictable. Moreover, design incentives and other market
13 forces would have prompted those endeavors.

14 **2. The Ericsson Solution**

15 The Ericsson Solution qualifies as prior art at least under 35 U.S.C. §§ 102(a)
16 and (g)(2) because it was known and/or used by others or made by others before the
17 earliest conception date that Plaintiff can establish for the Asserted Claims, and
18 under 35 U.S.C. § 102(e) because it was described in a patent granted on an
19 application for patent by another filed in the United States before the invention by
20 the Applicants.

21 Various references, including those identified below, disclose the features
22 and functionalities of the Ericsson Solution. Each underlying reference evidencing
23 the Ericsson Solution also individually qualifies as prior art. Exhibits 6-9 provide
24 examples of how the Ericsson Solution and associated references disclose, either
25 expressly or inherently, each element of the Asserted Claims, thereby anticipating
26 those claims under 35 U.S.C. § 102, using Plaintiff's apparent and overbroad
27 constructions of the claims. The following references evidence the Ericsson
28 Solution:

Exh.	EVIDENCE FOR THE PRIOR ART ERICSSON SOLUTION
6	U.S. Patent No. 6,442,391 to Johansson et al., entitled “Location Security for a Subscriber Unit in a Telecommunication System by Denying a Parties’ Location Request,” issued August 27, 2002 (the “Johansson Patent”). The Johansson Patent is entitled to a priority date of at least May 11, 1998. The Johansson Patent qualifies as prior art under at least 35 U.S.C. § 102(e).
7	U.S. Patent No. 6,138,003 to Kingdon et al., entitled “System and Method for Authorization of Location Services,” issued October 24, 2000 (the “Kingdon Patent”). The Kingdon Patent is entitled to a priority date of at least November 26, 1997. The Kingdon Patent qualifies as prior art under at least 35 U.S.C. § 102(e).
8	U.S. Patent No. 6,360,102 to Havinis et al., entitled “System and Method for Defining a Subscriber Location Privacy Profile,” issued March 19, 2002 (the “Havinis Patent”). The Havinis Patent is entitled to a priority date of at least September 10, 1998. The Havinis Patent qualifies as prior art under at least 35 U.S.C. § 102(e).
9	International PCT Application No. PCT/US97/11656 to Boltz et al., entitled “Method and Apparatus for Communicating Information on Mobile Station Position Within a Cellular Telephone Network,” published January 8, 1998 (the “Boltz Application”). The Boltz Application is entitled to a priority date at least as early as July 1, 1996. The Boltz Application qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (e).

Defendants reserve the right to contend that the references evidencing the Ericsson Solution constitute a single reference for purposes of anticipation. Defendants also reserve the right to contend that, if the Ericsson Solution references are considered individually, it would have been obvious to combine those references to render the Asserted Claims invalid, because those references, or the information contained therein, all discuss the same subject (*i.e.*, the Ericsson Solution).

To the extent any of the references evidencing the Ericsson Solution disclose a particular feature, it would have been obvious to combine that feature with other or all of the references evidencing the Ericsson Solution to render the Asserted

1 Claims invalid. The reasons or motivation to modify the references evidencing the
2 Ericsson Solution in that manner include, for example, the fact that it would have
3 been common sense to apply concepts that were already being described in one
4 reference about the Ericsson Solution to another reference about the same solution.

5 To the extent Plaintiff asserts that the Ericsson Solution, or any reference
6 evidencing the Ericsson Solution, does not anticipate the Asserted Claims, it would
7 also have been obvious to combine or modify the Ericsson Solution, or any
8 reference evidencing the Ericsson Solution, with concepts from other prior art such
9 as, for example, other prior art identified in Section IV and/or Appendices A-R, to
10 render the Asserted Claims invalid, because all of that prior art relates to wireless
11 location and/or wireless communication technology.

12 For example, it would have been obvious to combine or modify the Ericsson
13 Solution, or any reference evidencing that solution, to identify the source of a
14 location request, as described by the prior art from Appendix B, including, for
15 example, U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
16 Johansson et al.; U.S. Patent No. 5,946,626 to Foadare et al.; U.S. Patent No.
17 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S.
18 Application Serial No. 08/162,522 to Theimer et al.; JP Patent Publication No.
19 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural Considerations
20 for Scalable, Secure, Mobile Computing with Location Information,” IEEE
21 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
22 skill in the art would have been motivated to combine or modify the Ericsson
23 Solution in this manner for the reasons explained in Section IV.A and also because
24 the Ericsson Solution and the above-referenced prior art from Appendix B are all
25 directed towards wireless location determining and/or reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 Ericsson Solution, or any reference evidencing that solution, to transmit a location
28 request and the identification of the source of the request to a mobile unit and to

1 receive authorization from the mobile unit to allow or deny the request, as
2 described by the prior art from Appendix C, including, for example, U.S. Patent
3 No. 6,442,391 to Johansson et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
4 International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP Patent
5 Publication No. 6189359A to Michihiro. One of ordinary skill in the art would
6 have been motivated to combine or modify the Ericsson Solution in this manner for
7 the reasons explained in Section IV.A and also because the Ericsson Solution and
8 the above-referenced prior art from Appendix C are all directed towards wireless
9 location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Ericsson Solution, or any reference evidencing that solution, to use the methods of
12 authentication described by the prior art from Appendix D, including, for example,
13 The ATIS Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902
14 to Kawamoto; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No.
15 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
16 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
17 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
18 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
19 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
20 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
21 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
22 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
23 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
24 Considerations for Scalable, Secure, Mobile Computing with Location
25 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
26 One of ordinary skill in the art would have been motivated to combine or modify
27 the Ericsson Solution in this manner for the reasons explained in Section IV.A and
28 also because the Ericsson Solution and the above-referenced prior art from

1 Appendix D are all directed towards wireless location determining and/or reporting
2 technology.

3 As another example, it would have been obvious to combine or modify the
4 Ericsson Solution, or any reference evidencing that solution, to allow location
5 requests from some resources while denying location requests from other resource,
6 as described by the prior art from Appendix E, including, for example, The ATIS
7 Solution; U.S. Patent No. 5,950,137; Andy Harter et al., “A Distributed Location
8 System for the Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No.
9 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
10 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
11 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,493,692 to
12 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial
13 No. 08/162,522 to Theimer et al.; and Mike Spreitzer et al., “Architectural
14 Considerations for Scalable, Secure, Mobile Computing with Location
15 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
16 One of ordinary skill in the art would have been motivated to combine or modify
17 the Ericsson Solution in this manner for the reasons explained in Section IV.A and
18 also because the Ericsson Solution and the above-referenced prior art from
19 Appendix E are all directed towards wireless location determining and/or reporting
20 technology.

21 As another example, it would have been obvious to combine or modify the
22 Ericsson Solution, or any reference evidencing that solution, to use a profile to
23 allow or deny a request for location information, as described by the prior art from
24 Appendix F, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137
25 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; Andy Harter et al., “A Distributed
26 Location System for the Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S.
27 Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et
28 al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer

1 et al.; and U.S. Patent No. 6,360,102 to Havinis et al. One of ordinary skill in the
2 art would have been motivated to combine or modify the Ericsson Solution in this
3 manner for the reasons explained in Section IV.A and also because the Ericsson
4 Solution and the above-referenced prior art from Appendix F are all directed
5 towards wireless location determining and/or reporting technology.

6 As another example, it would have been obvious to combine or modify the
7 Ericsson Solution, or any reference evidencing that solution, to continuously track
8 the location of a mobile unit, as described by the prior art from Appendix G,
9 including, for example, U.S. Patent No. 6,169,902; Andy Harter et al., “A
10 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
11 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to
12 Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692
13 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No.
14 5,365,451 to Wang et al.; and International PCT Application No. PCT/US97/11656
15 to Boltz et al. One of ordinary skill in the art would have been motivated to
16 combine or modify the Ericsson Solution in this manner for the reasons explained
17 in Section IV.A and also because the Ericsson Solution and the above-referenced
18 prior art from Appendix G are all directed towards wireless location determining
19 and/or reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 Ericsson Solution, or any reference evidencing that solution, to detect an absence of
22 communication with a mobile unit, as described by the prior art from Appendix H,
23 including, for example, The ATIS Solution; U.S. Patent No. 5,504,491 to Chapman;
24 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to
25 Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No.
26 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; International
27 PCT Application No. PCT/US97/11656 to Boltz et al.; the GSM Specification; the
28 TIA/EIA/IS-95-A Specification; M. Mouly, et al., “The GSM System for Mobile

1 Communications”; Roy Want et al., “The Active Badge Location System,” ACM
2 Transactions on Information Systems, Vol. 10, Issue 1, January 1992; Roy Want et
3 al., “An Overview of the ParcTab Ubiquitous Computing Experiment,” IEEE
4 Personal Communications, December 1995; and JP Patent Publication No.
5 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
6 motivated to combine or modify the Ericsson Solution in this manner for the
7 reasons explained in Section IV.A and also because the Ericsson Solution and the
8 above-referenced prior art from Appendix H are all directed towards wireless
9 location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Ericsson Solution, or any reference evidencing that solution, to have a network
12 node allow or deny a request for location information, as described by the prior art
13 from Appendix I, including, for example, The ATIS Solution; U.S. Patent No.
14 6,169,902 to Kawamoto; U.S. Patent No. 5,950,137 to Kim; Andy Harter et al., “A
15 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
16 1994; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
17 Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Application
18 Serial No. 08/162,522 to Theimer et al.; International PCT Application No.
19 PCT/US97/11656 to Boltz et al.; and JP Patent Publication No. 6189359A to
20 Michihiro. One of ordinary skill in the art would have been motivated to combine
21 or modify the Ericsson Solution in this manner for the reasons explained in Section
22 IV.A and also because the Ericsson Solution and the above-referenced prior art
23 from Appendix I are all directed towards wireless location determining and/or
24 reporting technology.

25 As another example, it would have been obvious to combine or modify the
26 Ericsson Solution, or any reference evidencing that solution, to have a mobile unit
27 allow or deny a request for location information, as described by the prior art from
28 Appendix J, including, for example, U.S. Patent No. 6,442,391 to Johansson et al.;

1 U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis
2 et al.; JP Patent Publication No. 6189359A to Michihiro; and JP Patent Publication
3 No. 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
4 motivated to combine or modify the Ericsson Solution in this manner for the
5 reasons explained in Section IV.A and also because the Ericsson Solution and the
6 above-referenced prior art from Appendix J are all directed towards wireless
7 location determining and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Ericsson Solution, or any reference evidencing that solution, to forward information
10 regarding whether to allow or deny a location request from a first node to a second
11 node, as described by the prior art from Appendix L, including, for example, The
12 ATIS Solution; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No.
13 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S.
14 Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,493,692 to Theimer et
15 al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication No.
16 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural Considerations
17 for Scalable, Secure, Mobile Computing with Location Information,” IEEE
18 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
19 skill in the art would have been motivated to combine or modify the Ericsson
20 Solution in this manner for the reasons explained in Section IV.A and also because
21 the Ericsson Solution and the above-referenced prior art from Appendix L are all
22 directed towards wireless location determining and/or reporting technology.

23 One of ordinary skill in the art would not have limited himself when making
24 modifications to the Ericsson Solution to concepts solely implemented in or
25 discussed with reference to the Ericsson Solution. Rather, one of ordinary skill also
26 would have considered the concepts from other wireless location and/or wireless
27 communication solutions of the time. This would have been a result of ordinary
28 innovation, ordinary skill, and common sense and would have been obvious to try

1 and predictable. Moreover, design incentives and other market forces would have
2 prompted those endeavors.

3 **3. U.S. Patent No. 5,485,163 (Singer et al.)**

4 U.S. Patent No. 5,485,163 to Singer et al., entitled “Personal Locator
5 System,” issued on January 16, 1996 (the “Singer Patent”). The Singer Patent is
6 entitled to a priority date at least as early as March 30, 1994. The Singer Patent
7 qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b). The chart attached
8 as Exhibit 10 provides examples of where the Singer Patent discloses, either
9 expressly or inherently, each element of the Asserted Claims, thereby anticipating
10 those claims.

11 To the extent Plaintiff asserts that the Singer Patent does not anticipate the
12 Asserted Claims, it would have been obvious to combine or modify the Singer
13 Patent with concepts from other prior art such as, for example, other prior art
14 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
15 invalid, because all of that prior art relates to wireless location and/or wireless
16 communication technology.

17 For example, it would have been obvious to combine or modify the Singer
18 Patent to identify the source of a location request, as described by the prior art from
19 Appendix B, including, for example, U.S. Patent No. 6,138,003 to Kingdon et al.;
20 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to
21 Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
22 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et
23 al.; JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,
24 “Architectural Considerations for Scalable, Secure, Mobile Computing with
25 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
26 24, 1994. One of ordinary skill in the art would have been motivated to combine or
27 modify the Singer Patent in this manner for the reasons explained in Section IV.A
28 and also because the Singer Patent and the above-referenced prior art from

1 Appendix B are all directed towards wireless location determining and/or reporting
2 technology.

3 As another example, it would have been obvious to combine or modify the
4 Singer Patent to transmit a location request and the identification of the source of
5 the request to a mobile unit and to receive authorization from the mobile unit to
6 allow or deny the request, as described by the prior art from Appendix C, including,
7 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
8 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to
9 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
10 ordinary skill in the art would have been motivated to combine or modify the
11 Singer Patent in this manner for the reasons explained in Section IV.A and also
12 because the Singer Patent and the above-referenced prior art from Appendix C are
13 all directed towards wireless location determining and/or reporting technology.

14 As another example, it would have been obvious to combine or modify the
15 Singer Patent to use the methods of authentication described by the prior art from
16 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
17 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
18 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
19 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
20 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,091,957 to
21 Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692
22 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
23 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
24 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
25 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
26 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural
27 Considerations for Scalable, Secure, Mobile Computing with Location
28 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.

1 One of ordinary skill in the art would have been motivated to combine or modify
2 the Singer Patent in this manner for the reasons explained in Section IV.A and also
3 because the Singer Patent and the above-referenced prior art from Appendix D are
4 all directed towards wireless location determining and/or reporting technology.

5 As another example, it would have been obvious to combine or modify the
6 Singer Patent to allow location requests from some resources while denying
7 location requests from other resource, as described by the prior art from Appendix
8 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
9 Harter et al., "A Distributed Location System for the Active Office," Network,
10 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
11 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
12 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et
13 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
14 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
15 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
16 Computing with Location Information," IEEE Distributed Computing Systems
17 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
18 motivated to combine or modify the Singer Patent in this manner for the reasons
19 explained in Section IV.A and also because the Singer Patent and the above-
20 referenced prior art from Appendix E are all directed towards wireless location
21 determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Singer Patent to use a profile to allow or deny a request for location information, as
24 described by the prior art from Appendix F, including, for example, The ATIS
25 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
26 Kawamoto; Andy Harter et al., "A Distributed Location System for the Active
27 Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
28 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to

1 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
2 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
3 motivated to combine or modify the Singer Patent in this manner for the reasons
4 explained in Section IV.A and also because the Singer Patent and the above-
5 referenced prior art from Appendix F are all directed towards wireless location
6 determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Singer Patent to continuously track the location of a mobile unit, as described by
9 the prior art from Appendix G, including, for example, U.S. Patent No. 6,169,902;
10 Andy Harter et al., "A Distributed Location System for the Active Office,"
11 Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,091,957 to Larkins et al.;
12 U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et
13 al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 5,365,451 to Wang
14 et al.; and International PCT Application No. PCT/US97/11656 to Boltz et al. One
15 of ordinary skill in the art would have been motivated to combine or modify the
16 Singer Patent in this manner for the reasons explained in Section IV.A and also
17 because the Singer Patent and the above-referenced prior art from Appendix G are
18 all directed towards wireless location determining and/or reporting technology.

19 As another example, it would have been obvious to combine or modify the
20 Singer Patent to detect an absence of communication with a mobile unit, as
21 described by the prior art from Appendix H, including, for example, The ATIS
22 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
23 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
24 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; International
25 PCT Application No. PCT/US97/11656 to Boltz et al.; the GSM Specification; the
26 TIA/EIA/IS-95-A Specification; M. Mouly, et al., "The GSM System for Mobile
27 Communications"; Roy Want et al., "The Active Badge Location System," ACM
28 Transactions on Information Systems, Vol. 10, Issue 1, January 1992; Roy Want et

1 al., “An Overview of the ParcTab Ubiquitous Computing Experiment,” IEEE
2 Personal Communications, December 1995; and JP Patent Publication No.
3 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
4 motivated to combine or modify the Singer Patent in this manner for the reasons
5 explained in Section IV.A and also because the Singer Patent and the above-
6 referenced prior art from Appendix H are all directed towards wireless location
7 determining and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Singer Patent to have a network node allow or deny a request for location
10 information, as described by the prior art from Appendix I, including, for example,
11 The ATIS Solution; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
12 5,950,137 to Kim; Andy Harter et al., “A Distributed Location System for the
13 Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to
14 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
15 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to Theimer et
16 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP
17 Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the art
18 would have been motivated to combine or modify the Singer Patent in this manner
19 for the reasons explained in Section IV.A and also because the Singer Patent and
20 the above-referenced prior art from Appendix I are all directed towards wireless
21 location determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Singer Patent to have a mobile unit allow or deny a request for location
24 information, as described by the prior art from Appendix J, including, for example,
25 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to
26 Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication
27 No. 6189359A to Michihiro; and JP Patent Publication No. 9147291A to
28 Yoshiyuki. One of ordinary skill in the art would have been motivated to combine

1 or modify the Singer Patent in this manner for the reasons explained in Section
2 IV.A and also because the Singer Patent and the above-referenced prior art from
3 Appendix J are all directed towards wireless location determining and/or reporting
4 technology.

5 As another example, it would have been obvious to combine or modify the
6 Singer Patent to obtain the identification of a mobile unit whose location has been
7 requested, as described by the prior art from Appendix K, including, for example,
8 U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon
9 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to
10 Foladare et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No.
11 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent
12 No. 5,625,668 to Loomis et al.; International PCT Application No.
13 PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to Michihiro;
14 Mike Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
15 Computing with Location Information," IEEE Distributed Computing Systems
16 Conference, June 21-24, 1994; and the GSM Specification. One of ordinary skill in
17 the art would have been motivated to combine or modify the Singer Patent in this
18 manner for the reasons explained in Section IV.A and also because the Singer
19 Patent and the above-referenced prior art from Appendix K are all directed towards
20 wireless location determining and/or reporting technology.

21 As another example, it would have been obvious to combine or modify the
22 Singer Patent to forward information regarding whether to allow or deny a location
23 request from a first node to a second node, as described by the prior art from
24 Appendix L, including, for example, The ATIS Solution; U.S. Patent No. 6,138,003
25 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
26 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S.
27 Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
28 JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,

1 “Architectural Considerations for Scalable, Secure, Mobile Computing with
2 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
3 24, 1994. One of ordinary skill in the art would have been motivated to combine or
4 modify the Singer Patent in this manner for the reasons explained in Section IV.A
5 and also because the Singer Patent and the above-referenced prior art from
6 Appendix L are all directed towards wireless location determining and/or reporting
7 technology.

8 As described above, one of ordinary skill in the art would not have limited
9 himself to a specific technology when making modifications or improvements to
10 the Singer Patent, but would have modified the Singer Patent with concepts from
11 other wireless location and/or wireless communication solutions of the time. This
12 would have been a result of ordinary innovation, ordinary skill, and common sense
13 and would have been obvious to try and predictable. Moreover, design incentives
14 and other market forces would have prompted those endeavors.

15 **4. U.S. Patent No. 5,625,668 (Loomis et al.)**

16 U.S. Patent No. 5,625,668 to Loomis et al., entitled “Position Reporting
17 Cellular Telephone,” issued on April 29, 1997 (the “Loomis Patent”). The Loomis
18 Patent is entitled to a priority date at least as early as April 12, 1994. The Loomis
19 Patent qualifies as prior art under at least 35 U.S.C. § 102(a). The chart attached as
20 Exhibit 11 provides examples of where the Loomis Patent discloses, either
21 expressly or inherently, each element of the Asserted Claims, thereby anticipating
22 those claims.

23 To the extent Plaintiff asserts that the Loomis Patent does not anticipate the
24 Asserted Claims, it would have been obvious to combine or modify the Loomis
25 Patent with concepts from other prior art such as, for example, other prior art
26 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
27 invalid, because all of that prior art relates to wireless location and/or wireless
28 communication technology.

1 For example, it would have been obvious to combine or modify the Loomis
2 Patent to identify the source of a location request, as described by the prior art from
3 Appendix B, including, for example, U.S. Patent No. 6,138,003 to Kingdon et al.;
4 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to
5 Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
6 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et
7 al.; JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,
8 “Architectural Considerations for Scalable, Secure, Mobile Computing with
9 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
10 24, 1994. One of ordinary skill in the art would have been motivated to combine or
11 modify the Loomis Patent in this manner for the reasons explained in Section IV.A
12 and also because the Loomis Patent and the above-referenced prior art from
13 Appendix B are all directed towards wireless location determining and/or reporting
14 technology.

15 As another example, it would have been obvious to combine or modify the
16 Loomis Patent to transmit a location request and the identification of the source of
17 the request to a mobile unit and to receive authorization from the mobile unit to
18 allow or deny the request, as described by the prior art from Appendix C, including,
19 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
20 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to
21 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
22 ordinary skill in the art would have been motivated to combine or modify the
23 Loomis Patent in this manner for the reasons explained in Section IV.A and also
24 because the Loomis Patent and the above-referenced prior art from Appendix C are
25 all directed towards wireless location determining and/or reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 Loomis Patent to use the methods of authentication described by the prior art from
28 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.

1 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
 2 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
 3 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
 4 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
 5 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
 6 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
 7 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
 8 No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S.
 9 Application Serial No. 08/162,522 to Theimer et al.; International PCT Application
 10 No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to
 11 Michihiro; and Mike Spreitzer et al., “Architectural Considerations for Scalable,
 12 Secure, Mobile Computing with Location Information,” IEEE Distributed
 13 Computing Systems Conference, June 21-24, 1994. One of ordinary skill in the art
 14 would have been motivated to combine or modify the Loomis Patent in this manner
 15 for the reasons explained in Section IV.A and also because the Loomis Patent and
 16 the above-referenced prior art from Appendix D are all directed towards wireless
 17 location determining and/or reporting technology.

18 As another example, it would have been obvious to combine or modify the
 19 Loomis Patent to allow location requests from some resources while denying
 20 location requests from other resource, as described by the prior art from Appendix
 21 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
 22 Harter et al., “A Distributed Location System for the Active Office,” Network,
 23 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
 24 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
 25 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
 26 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
 27 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
 28 Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile

1 Computing with Location Information,” IEEE Distributed Computing Systems
2 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
3 motivated to combine or modify the Loomis Patent in this manner for the reasons
4 explained in Section IV.A and also because the Loomis Patent and the above-
5 referenced prior art from Appendix E are all directed towards wireless location
6 determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Loomis Patent to use a profile to allow or deny a request for location information,
9 as described by the prior art from Appendix F, including, for example, The ATIS
10 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
11 Kawamoto; Andy Harter et al., “A Distributed Location System for the Active
12 Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
13 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
14 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
15 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
16 motivated to combine or modify the Loomis Patent in this manner for the reasons
17 explained in Section IV.A and also because the Loomis Patent and the above-
18 referenced prior art from Appendix F are all directed towards wireless location
19 determining and/or reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 Loomis Patent to continuously track the location of a mobile unit, as described by
22 the prior art from Appendix G, including, for example, U.S. Patent No. 6,169,902;
23 Andy Harter et al., “A Distributed Location System for the Active Office,”
24 Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S.
25 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.;
26 U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro,
27 et al.; U.S. Patent No. 5,365,451 to Wang et al.; and International PCT Application
28 No. PCT/US97/11656 to Boltz et al. One of ordinary skill in the art would have

1 been motivated to combine or modify the Loomis Patent in this manner for the
2 reasons explained in Section IV.A and also because the Loomis Patent and the
3 above-referenced prior art from Appendix G are all directed towards wireless
4 location determining and/or reporting technology.

5 As another example, it would have been obvious to combine or modify the
6 Loomis Patent to detect an absence of communication with a mobile unit, as
7 described by the prior art from Appendix H, including, for example, The ATIS
8 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
9 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
10 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
11 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
12 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
13 Mouly, et al., "The GSM System for Mobile Communications"; Roy Want et al.,
14 "The Active Badge Location System," ACM Transactions on Information Systems,
15 Vol. 10, Issue 1, January 1992; Roy Want et al., "An Overview of the ParcTab
16 Ubiquitous Computing Experiment," IEEE Personal Communications, December
17 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
18 in the art would have been motivated to combine or modify the Loomis Patent in
19 this manner for the reasons explained in Section IV.A and also because the Loomis
20 Patent and the above-referenced prior art from Appendix H are all directed towards
21 wireless location determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Loomis Patent to have a network node allow or deny a request for location
24 information, as described by the prior art from Appendix I, including, for example,
25 The ATIS Solution; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
26 5,950,137 to Kim; Andy Harter et al., "A Distributed Location System for the
27 Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to
28 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.

1 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to Theimer et
2 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP
3 Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the art
4 would have been motivated to combine or modify the Loomis Patent in this manner
5 for the reasons explained in Section IV.A and also because the Loomis Patent and
6 the above-referenced prior art from Appendix I are all directed towards wireless
7 location determining and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Loomis Patent to have a mobile unit allow or deny a request for location
10 information, as described by the prior art from Appendix J, including, for example,
11 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to
12 Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication
13 No. 6189359A to Michihiro; and JP Patent Publication No. 9147291A to
14 Yoshiyuki. One of ordinary skill in the art would have been motivated to combine
15 or modify the Loomis Patent in this manner for the reasons explained in Section
16 IV.A and also because the Loomis Patent and the above-referenced prior art from
17 Appendix J are all directed towards wireless location determining and/or reporting
18 technology.

19 As another example, it would have been obvious to combine or modify the
20 Loomis Patent to forward information regarding whether to allow or deny a
21 location request from a first node to a second node, as described by the prior art
22 from Appendix L, including, for example, The ATIS Solution; U.S. Patent No.
23 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
24 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
25 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
26 Havinis et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
27 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
28 Computing with Location Information," IEEE Distributed Computing Systems

1 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
2 motivated to combine or modify the Loomis Patent in this manner for the reasons
3 explained in Section IV.A and also because the Loomis Patent and the above-
4 referenced prior art from Appendix L are all directed towards wireless location
5 determining and/or reporting technology.

6 As described above, one of ordinary skill in the art would not have limited
7 himself to a specific technology when making modifications or improvements to
8 the Loomis Patent, but would have modified the Loomis Patent with concepts from
9 other wireless location and/or wireless communication solutions of the time. This
10 would have been a result of ordinary innovation, ordinary skill, and common sense
11 and would have been obvious to try and predictable. Moreover, design incentives
12 and other market forces would have prompted those endeavors.

13 **5. U.S. Patent No. 5,731,785 (Lemelson et al.)**

14 U.S. Patent No. 5,731,785 to Lemelson et al., entitled “System and Method
15 for Locating Objects Including an Inhibiting Feature,” issued on March 24, 1998
16 (the “Lemelson Patent”). The Lemelson Patent is entitled to a priority date at least
17 as early as May 13, 1994. The Lemelson Patent qualifies as prior art under at least
18 35 U.S.C. §§ 102(a) and (e). The chart attached as Exhibit 12 provides examples of
19 where the Lemelson Patent discloses, either expressly or inherently, each element
20 of the Asserted Claims, thereby anticipating those claims.

21 To the extent Plaintiff asserts that the Lemelson Patent does not anticipate the
22 Asserted Claims, it would have been obvious to combine or modify the Lemelson
23 Patent with concepts from other prior art such as, for example, other prior art
24 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
25 invalid, because all of that prior art relates to wireless location and/or wireless
26 communication technology.

27 For example, it would have been obvious to combine or modify the
28 Lemelson Patent to identify the source of a location request, as described by the

1 prior art from Appendix B, including, for example, U.S. Patent No. 6,138,003 to
2 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
3 5,946,626 to Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
4 Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to
5 Theimer et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
6 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
7 Computing with Location Information," IEEE Distributed Computing Systems
8 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
9 motivated to combine or modify the Lemelson Patent in this manner for the reasons
10 explained in Section IV.A and also because the Lemelson Patent and the above-
11 referenced prior art from Appendix B are all directed towards wireless location
12 determining and/or reporting technology.

13 As another example, it would have been obvious to combine or modify the
14 Lemelson Patent to transmit a location request and the identification of the source
15 of the request to a mobile unit and to receive authorization from the mobile unit to
16 allow or deny the request, as described by the prior art from Appendix C, including,
17 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
18 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to
19 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
20 ordinary skill in the art would have been motivated to combine or modify the
21 Lemelson Patent in this manner for the reasons explained in Section IV.A and also
22 because the Lemelson Patent and the above-referenced prior art from Appendix C
23 are all directed towards wireless location determining and/or reporting technology.

24 As another example, it would have been obvious to combine or modify the
25 Lemelson Patent to use the methods of authentication described by the prior art
26 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
27 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
28 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.

1 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
2 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
3 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
4 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
5 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
6 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
7 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
8 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
9 Considerations for Scalable, Secure, Mobile Computing with Location
10 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
11 One of ordinary skill in the art would have been motivated to combine or modify
12 the Lemelson Patent in this manner for the reasons explained in Section IV.A and
13 also because the Lemelson Patent and the above-referenced prior art from Appendix
14 D are all directed towards wireless location determining and/or reporting
15 technology.

16 As another example, it would have been obvious to combine or modify the
17 Lemelson Patent to allow location requests from some resources while denying
18 location requests from other resource, as described by the prior art from Appendix
19 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
20 Harter et al., “A Distributed Location System for the Active Office,” Network,
21 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
22 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
23 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.;
24 U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522
25 to Theimer et al.; and Mike Spreitzer et al., “Architectural Considerations for
26 Scalable, Secure, Mobile Computing with Location Information,” IEEE Distributed
27 Computing Systems Conference, June 21-24, 1994. One of ordinary skill in the art
28 would have been motivated to combine or modify the Lemelson Patent in this

1 manner for the reasons explained in Section IV.A and also because the Lemelson
2 Patent and the above-referenced prior art from Appendix E are all directed towards
3 wireless location determining and/or reporting technology.

4 As another example, it would have been obvious to combine or modify the
5 Lemelson Patent to use a profile to allow or deny a request for location information,
6 as described by the prior art from Appendix F, including, for example, The ATIS
7 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
8 Kawamoto; Andy Harter et al., “A Distributed Location System for the Active
9 Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
10 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
11 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
12 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
13 motivated to combine or modify the Lemelson Patent in this manner for the reasons
14 explained in Section IV.A and also because the Lemelson Patent and the above-
15 referenced prior art from Appendix F are all directed towards wireless location
16 determining and/or reporting technology.

17 As another example, it would have been obvious to combine or modify the
18 Lemelson Patent to continuously track the location of a mobile unit, as described by
19 the prior art from Appendix G, including, for example, U.S. Patent No. 6,169,902;
20 Andy Harter et al., “A Distributed Location System for the Active Office,”
21 Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S.
22 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.;
23 U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro,
24 et al.; U.S. Patent No. 5,365,451 to Wang et al.; and International PCT Application
25 No. PCT/US97/11656 to Boltz et al. One of ordinary skill in the art would have
26 been motivated to combine or modify the Lemelson Patent in this manner for the
27 reasons explained in Section IV.A and also because the Lemelson Patent and the
28

1 above-referenced prior art from Appendix G are all directed towards wireless
2 location determining and/or reporting technology.

3 As another example, it would have been obvious to combine or modify the
4 Lemelson Patent to detect an absence of communication with a mobile unit, as
5 described by the prior art from Appendix H, including, for example, The ATIS
6 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
7 Johansson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No.
8 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; International
9 PCT Application No. PCT/US97/11656 to Boltz et al.; the GSM Specification; the
10 TIA/EIA/IS-95-A Specification; M. Mouly, et al., "The GSM System for Mobile
11 Communications"; Roy Want et al., "The Active Badge Location System," ACM
12 Transactions on Information Systems, Vol. 10, Issue 1, January 1992; Roy Want et
13 al., "An Overview of the ParcTab Ubiquitous Computing Experiment," IEEE
14 Personal Communications, December 1995; and JP Patent Publication No.
15 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
16 motivated to combine or modify the Lemelson Patent in this manner for the reasons
17 explained in Section IV.A and also because the Lemelson Patent and the above-
18 referenced prior art from Appendix H are all directed towards wireless location
19 determining and/or reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 Lemelson Patent to have a network node allow or deny a request for location
22 information, as described by the prior art from Appendix I, including, for example,
23 The ATIS Solution; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
24 5,950,137 to Kim; Andy Harter et al., "A Distributed Location System for the
25 Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to
26 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
27 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to Theimer et
28 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP

1 Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the art
2 would have been motivated to combine or modify the Lemelson Patent in this
3 manner for the reasons explained in Section IV.A and also because the Lemelson
4 Patent and the above-referenced prior art from Appendix I are all directed towards
5 wireless location determining and/or reporting technology.

6 As another example, it would have been obvious to combine or modify the
7 Lemelson Patent to obtain the identification of a mobile unit whose location has
8 been requested, as described by the prior art from Appendix K, including, for
9 example, U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to
10 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
11 5,946,626 to Foladare et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent
12 No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S.
13 Patent No. 5,625,668 to Loomis et al.; International PCT Application No.
14 PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to Michihiro;
15 Mike Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
16 Computing with Location Information," IEEE Distributed Computing Systems
17 Conference, June 21-24, 1994; and the GSM Specification. One of ordinary skill in
18 the art would have been motivated to combine or modify the Lemelson Patent in
19 this manner for the reasons explained in Section IV.A and also because the
20 Lemelson Patent and the above-referenced prior art from Appendix K are all
21 directed towards wireless location determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Lemelson Patent to forward information regarding whether to allow or deny a
24 location request from a first node to a second node, as described by the prior art
25 from Appendix L, including, for example, The ATIS Solution; U.S. Patent No.
26 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
27 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.;
28 U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication No. 6189359A to

1 Michihiro; and Mike Spreitzer et al., “Architectural Considerations for Scalable,
2 Secure, Mobile Computing with Location Information,” IEEE Distributed
3 Computing Systems Conference, June 21-24, 1994. One of ordinary skill in the art
4 would have been motivated to combine or modify the Lemelson Patent in this
5 manner for the reasons explained in Section IV.A and also because the Lemelson
6 Patent and the above-referenced prior art from Appendix L are all directed towards
7 wireless location determining and/or reporting technology.

8 As described above, one of ordinary skill in the art would not have limited
9 himself to a specific technology when making modifications or improvements to
10 the Lemelson Patent, but would have modified the Lemelson Patent with concepts
11 from other wireless location and/or wireless communication solutions of the time.
12 This would have been a result of ordinary innovation, ordinary skill, and common
13 sense and would have been obvious to try and predictable. Moreover, design
14 incentives and other market forces would have prompted those endeavors.

15 **6. U.S. Patent No. 5,946,626 (Foladare et al.)**

16 U.S. Patent No. 5,946,626 to Foladare et al., entitled “Method and System for
17 Determining Location of Subscriber of Two-Way Paging Service,” issued on
18 August 31, 1999 (the “Foladare Patent”). The Foladare Patent is entitled to a
19 priority date at least as early as December 26, 1995. The Foladare Patent qualifies
20 as prior art under at least 35 U.S.C. §§ 102(e). The chart attached as Exhibit 13
21 provides examples of where the Foladare Patent discloses, either expressly or
22 inherently, each element of the Asserted Claims, thereby anticipating those claims.

23 To the extent Plaintiff asserts that the Foladare Patent does not anticipate the
24 Asserted Claims, it would have been obvious to combine or modify the Foladare
25 Patent with concepts from other prior art such as, for example, other prior art
26 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
27 invalid, because all of that prior art relates to wireless location and/or wireless
28 communication technology.

1 For example, it would have been obvious to combine or modify the Foladare
2 Patent to transmit a location request and the identification of the source of the
3 request to a mobile unit and to receive authorization from the mobile unit to allow
4 or deny the request, as described by the prior art from Appendix C, including, for
5 example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 6,360,102
6 to Havinis et al.; International PCT Application No. PCT/US97/11656 to Boltz et
7 al.; and JP Patent Publication No. 6189359A to Michihiro. One of ordinary skill in
8 the art would have been motivated to combine or modify the Foladare Patent in this
9 manner for the reasons explained in Section IV.A and also because the Foladare
10 Patent and the above-referenced prior art from Appendix C are all directed towards
11 wireless location determining and/or reporting technology.

12 As another example, it would have been obvious to combine or modify the
13 Foladare Patent to use the methods of authentication described by the prior art from
14 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
15 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
16 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
17 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et
18 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
19 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
20 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
21 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
22 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
23 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
24 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural
25 Considerations for Scalable, Secure, Mobile Computing with Location
26 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.
27 One of ordinary skill in the art would have been motivated to combine or modify
28 the Foladare Patent in this manner for the reasons explained in Section IV.A and

1 also because the Foladare Patent and the above-referenced prior art from Appendix
2 D are all directed towards wireless location determining and/or reporting
3 technology.

4 As another example, it would have been obvious to combine or modify the
5 Foladare Patent to use a profile to allow or deny a request for location information,
6 as described by the prior art from Appendix F, including, for example, The ATIS
7 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
8 Kawamoto; Andy Harter et al., "A Distributed Location System for the Active
9 Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
10 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
11 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
12 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
13 motivated to combine or modify the Foladare Patent in this manner for the reasons
14 explained in Section IV.A and also because the Foladare Patent and the above-
15 referenced prior art from Appendix F are all directed towards wireless location
16 determining and/or reporting technology.

17 As another example, it would have been obvious to combine or modify the
18 Foladare Patent to continuously track the location of a mobile unit, as described by
19 the prior art from Appendix G, including, for example, U.S. Patent No. 6,169,902;
20 Andy Harter et al., "A Distributed Location System for the Active Office,"
21 Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S.
22 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.;
23 U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro,
24 et al.; U.S. Patent No. 5,365,451 to Wang et al.; and International PCT Application
25 No. PCT/US97/11656 to Boltz et al. One of ordinary skill in the art would have
26 been motivated to combine or modify the Foladare Patent in this manner for the
27 reasons explained in Section IV.A and also because the Foladare Patent and the
28

1 above-referenced prior art from Appendix G are all directed towards wireless
2 location determining and/or reporting technology.

3 As another example, it would have been obvious to combine or modify the
4 Foladare Patent to detect an absence of communication with a mobile unit, as
5 described by the prior art from Appendix H, including, for example, The ATIS
6 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
7 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
8 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
9 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
10 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
11 Mouly, et al., "The GSM System for Mobile Communications"; Roy Want et al.,
12 "The Active Badge Location System," ACM Transactions on Information Systems,
13 Vol. 10, Issue 1, January 1992; Roy Want et al., "An Overview of the ParcTab
14 Ubiquitous Computing Experiment," IEEE Personal Communications, December
15 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
16 in the art would have been motivated to combine or modify the Foladare Patent in
17 this manner for the reasons explained in Section IV.A and also because the
18 Foladare Patent and the above-referenced prior art from Appendix H are all directed
19 towards wireless location determining and/or reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 Foladare Patent to have a mobile unit allow or deny a request for location
22 information, as described by the prior art from Appendix J, including, for example,
23 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to
24 Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication
25 No. 6189359A to Michihiro; and JP Patent Publication No. 9147291A to
26 Yoshiyuki. One of ordinary skill in the art would have been motivated to combine
27 or modify the Foladare Patent in this manner for the reasons explained in Section
28 IV.A and also because the Foladare Patent and the above-referenced prior art from

1 Appendix J are all directed towards wireless location determining and/or reporting
2 technology.

3 As described above, one of ordinary skill in the art would not have limited
4 himself to a specific technology when making modifications or improvements to
5 the Foladare Patent, but would have modified the Foladare Patent with concepts
6 from other wireless location and/or wireless communication solutions of the time.
7 This would have been a result of ordinary innovation, ordinary skill, and common
8 sense and would have been obvious to try and predictable. Moreover, design
9 incentives and other market forces would have prompted those endeavors.

10 **7. U.S. Patent No. 6,091,957 (Larkins et al.)**

11 U.S. Patent No. 6,091,957 to Larkins et al., entitled “System and Method for
12 Providing a Geographic Location of a Mobile Telecommunications Unit,” issued on
13 July 18, 2000 (the “Larkins Patent”). The Larkins Patent is entitled to a priority
14 date at least as early as June 12, 1997. The Larkins Patent qualifies as prior art
15 under at least 35 U.S.C. § 102(e). The chart attached as Exhibit 14 provides
16 examples of where the Larkins Patent discloses, either expressly or inherently, each
17 element of the Asserted Claims, thereby anticipating those claims.

18 To the extent Plaintiff asserts that the Larkins Patent does not anticipate the
19 Asserted Claims, it would have been obvious to combine or modify the Larkins
20 Patent with concepts from other prior art such as, for example, other prior art
21 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
22 invalid, because all of that prior art relates to wireless location and/or wireless
23 communication technology.

24 For example, it would have been obvious to combine or modify the Larkins
25 Patent to identify the source of a location request, as described by the prior art from
26 Appendix B, including, for example, U.S. Patent No. 6,138,003 to Kingdon et al.;
27 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to
28 Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.

1 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et
2 al.; JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,
3 “Architectural Considerations for Scalable, Secure, Mobile Computing with
4 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
5 24, 1994. One of ordinary skill in the art would have been motivated to combine or
6 modify the Larkins Patent in this manner for the reasons explained in Section IV.A
7 and also because the Larkins Patent and the above-referenced prior art from
8 Appendix B are all directed towards wireless location determining and/or reporting
9 technology.

10 As another example, it would have been obvious to combine or modify the
11 Larkins Patent to transmit a location request and the identification of the source of
12 the request to a mobile unit and to receive authorization from the mobile unit to
13 allow or deny the request, as described by the prior art from Appendix C, including,
14 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
15 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to
16 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
17 ordinary skill in the art would have been motivated to combine or modify the
18 Larkins Patent in this manner for the reasons explained in Section IV.A and also
19 because the Larkins Patent and the above-referenced prior art from Appendix C are
20 all directed towards wireless location determining and/or reporting technology.

21 As another example, it would have been obvious to combine or modify the
22 Larkins Patent to use the methods of authentication described by the prior art from
23 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
24 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
25 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
26 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
27 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
28 Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to

1 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
2 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
3 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
4 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
5 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
6 Considerations for Scalable, Secure, Mobile Computing with Location
7 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
8 One of ordinary skill in the art would have been motivated to combine or modify
9 the Larkins Patent in this manner for the reasons explained in Section IV.A and also
10 because the Larkins Patent and the above-referenced prior art from Appendix D are
11 all directed towards wireless location determining and/or reporting technology.

12 As another example, it would have been obvious to combine or modify the
13 Larkins Patent to allow location requests from some resources while denying
14 location requests from other resource, as described by the prior art from Appendix
15 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
16 Harter et al., “A Distributed Location System for the Active Office,” Network,
17 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
18 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
19 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
20 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
21 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
22 Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile
23 Computing with Location Information,” IEEE Distributed Computing Systems
24 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
25 motivated to combine or modify the Larkins Patent in this manner for the reasons
26 explained in Section IV.A and also because the Larkins Patent and the above-
27 referenced prior art from Appendix E are all directed towards wireless location
28 determining and/or reporting technology.

1 As another example, it would have been obvious to combine or modify the
2 Larkins Patent to use a profile to allow or deny a request for location information,
3 as described by the prior art from Appendix F, including, for example, The ATIS
4 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
5 Kawamoto; Andy Harter et al., "A Distributed Location System for the Active
6 Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
7 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
8 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
9 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
10 motivated to combine or modify the Larkins Patent in this manner for the reasons
11 explained in Section IV.A and also because the Larkins Patent and the above-
12 referenced prior art from Appendix F are all directed towards wireless location
13 determining and/or reporting technology.

14 As another example, it would have been obvious to combine or modify the
15 Larkins Patent to detect an absence of communication with a mobile unit, as
16 described by the prior art from Appendix H, including, for example, The ATIS
17 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
18 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
19 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
20 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
21 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
22 Mouly, et al., "The GSM System for Mobile Communications"; Roy Want et al.,
23 "The Active Badge Location System," ACM Transactions on Information Systems,
24 Vol. 10, Issue 1, January 1992; Roy Want et al., "An Overview of the ParcTab
25 Ubiquitous Computing Experiment," IEEE Personal Communications, December
26 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
27 in the art would have been motivated to combine or modify the Larkins Patent in
28 this manner for the reasons explained in Section IV.A and also because the Larkins

1 Patent and the above-referenced prior art from Appendix H are all directed towards
2 wireless location determining and/or reporting technology.

3 As another example, it would have been obvious to combine or modify the
4 Larkins Patent to have a network node allow or deny a request for location
5 information, as described by the prior art from Appendix I, including, for example,
6 The ATIS Solution; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
7 5,950,137 to Kim; Andy Harter et al., "A Distributed Location System for the
8 Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to
9 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
10 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to Theimer et
11 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP
12 Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the art
13 would have been motivated to combine or modify the Larkins Patent in this manner
14 for the reasons explained in Section IV.A and also because the Larkins Patent and
15 the above-referenced prior art from Appendix I are all directed towards wireless
16 location determining and/or reporting technology.

17 As another example, it would have been obvious to combine or modify the
18 Larkins Patent to have a mobile unit allow or deny a request for location
19 information, as described by the prior art from Appendix J, including, for example,
20 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to
21 Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP Patent Publication
22 No. 6189359A to Michihiro; and JP Patent Publication No. 9147291A to
23 Yoshiyuki. One of ordinary skill in the art would have been motivated to combine
24 or modify the Larkins Patent in this manner for the reasons explained in Section
25 IV.A and also because the Larkins Patent and the above-referenced prior art from
26 Appendix J are all directed towards wireless location determining and/or reporting
27 technology.

1 As another example, it would have been obvious to combine or modify the
2 Larkins Patent to forward information regarding whether to allow or deny a
3 location request from a first node to a second node, as described by the prior art
4 from Appendix L, including, for example, The ATIS Solution; U.S. Patent No.
5 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
6 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et
7 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
8 Havinis et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
9 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
10 Computing with Location Information," IEEE Distributed Computing Systems
11 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
12 motivated to combine or modify the Larkins Patent in this manner for the reasons
13 explained in Section IV.A and also because the Larkins Patent and the above-
14 referenced prior art from Appendix L are all directed towards wireless location
15 determining and/or reporting technology.

16 As described above, one of ordinary skill in the art would not have limited
17 himself to a specific technology when making modifications or improvements to
18 the Larkins Patent, but would have modified the Larkins Patent with concepts from
19 other wireless location and/or wireless communication solutions of the time. This
20 would have been a result of ordinary innovation, ordinary skill, and common sense
21 and would have been obvious to try and predictable. Moreover, design incentives
22 and other market forces would have prompted those endeavors.

23 **8. U.S. Patent No. 6,924,748 (Obradovich et al.)**

24 U.S. Patent No. 6,924,748 to Obradovich et al., entitled "Personal
25 Communication and Positioning System," issued on August 2, 2005 (the
26 "Obradovich Patent"). The Obradovich Patent is entitled to a priority date at least
27 as early as June 20, 1997. The Obradovich Patent qualifies as prior art under at
28 least 35 U.S.C. § 102(e). The chart attached as Exhibit 15 provides examples of

1 where the Obradovich Patent discloses, either expressly or inherently, each element
2 of the Asserted Claims, thereby anticipating those claims.

3 To the extent Plaintiff asserts that the Obradovich Patent does not anticipate
4 the Asserted Claims, it would have been obvious to combine or modify the
5 Obradovich Patent with concepts from other prior art such as, for example, other
6 prior art identified in Section IV and/or Appendices A-R, to render the Asserted
7 Claims invalid, because all of that prior art relates to wireless location and/or
8 wireless communication technology.

9 For example, it would have been obvious to combine or modify the
10 Obradovich Patent to identify the source of a location request, as described by the
11 prior art from Appendix B, including, for example, U.S. Patent No. 6,138,003 to
12 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
13 5,946,626 to Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
14 Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to
15 Theimer et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
16 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
17 Computing with Location Information," IEEE Distributed Computing Systems
18 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
19 motivated to combine or modify the Obradovich Patent in this manner for the
20 reasons explained in Section IV.A and also because the Obradovich Patent and the
21 above-referenced prior art from Appendix B are all directed towards wireless
22 location determining and/or reporting technology.

23 As another example, it would have been obvious to combine or modify the
24 Obradovich Patent to transmit a location request and the identification of the source
25 of the request to a mobile unit and to receive authorization from the mobile unit to
26 allow or deny the request, as described by the prior art from Appendix C, including,
27 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
28 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to

1 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
2 ordinary skill in the art would have been motivated to combine or modify the
3 Obradovich Patent in this manner for the reasons explained in Section IV.A and
4 also because the Obradovich Patent and the above-referenced prior art from
5 Appendix C are all directed towards wireless location determining and/or reporting
6 technology.

7 As another example, it would have been obvious to combine or modify the
8 Obradovich Patent to use the methods of authentication described by the prior art
9 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
10 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
11 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
12 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
13 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
14 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
15 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
16 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
17 No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S.
18 Application Serial No. 08/162,522 to Theimer et al.; International PCT Application
19 No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to
20 Michihiro; and Mike Spreitzer et al., "Architectural Considerations for Scalable,
21 Secure, Mobile Computing with Location Information," IEEE Distributed
22 Computing Systems Conference, June 21-24, 1994. One of ordinary skill in the art
23 would have been motivated to combine or modify the Obradovich Patent in this
24 manner for the reasons explained in Section IV.A and also because the Obradovich
25 Patent and the above-referenced prior art from Appendix D are all directed towards
26 wireless location determining and/or reporting technology.

27 As another example, it would have been obvious to combine or modify the
28 Obradovich Patent to allow location requests from some resources while denying

1 location requests from other resource, as described by the prior art from Appendix
2 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
3 Harter et al., "A Distributed Location System for the Active Office," Network,
4 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
5 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
6 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et
7 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
8 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
9 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
10 Computing with Location Information," IEEE Distributed Computing Systems
11 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
12 motivated to combine or modify the Obradovich Patent in this manner for the
13 reasons explained in Section IV.A and also because the Obradovich Patent and the
14 above-referenced prior art from Appendix E are all directed towards wireless
15 location determining and/or reporting technology.

16 As another example, it would have been obvious to combine or modify the
17 Obradovich Patent to use a profile to allow or deny a request for location
18 information, as described by the prior art from Appendix F, including, for example,
19 The ATIS Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902
20 to Kawamoto; Andy Harter et al., "A Distributed Location System for the Active
21 Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
22 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
23 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
24 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
25 motivated to combine or modify the Obradovich Patent in this manner for the
26 reasons explained in Section IV.A and also because the Obradovich Patent and the
27 above-referenced prior art from Appendix F are all directed towards wireless
28 location determining and/or reporting technology.

1 As another example, it would have been obvious to combine or modify the
2 Obradovich Patent, or any reference evidencing that system, to continuously track
3 the location of a mobile unit, as described by the prior art from Appendix G,
4 including, for example, U.S. Patent No. 6,169,902; Andy Harter et al., "A
5 Distributed Location System for the Active Office," Network, IEEE Vol. 8 No. 1,
6 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to
7 Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692
8 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No.
9 5,365,451 to Wang et al.; and International PCT Application No. PCT/US97/11656
10 to Boltz et al. One of ordinary skill in the art would have been motivated to
11 combine or modify the Obradovich Patent in this manner for the reasons explained
12 in Section IV.A and also because the Obradovich Patent and the above-referenced
13 prior art from Appendix G are all directed towards wireless location determining
14 and/or reporting technology.

15 As another example, it would have been obvious to combine or modify the
16 Obradovich Patent to detect an absence of communication with a mobile unit, as
17 described by the prior art from Appendix H, including, for example, The ATIS
18 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
19 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
20 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
21 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
22 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
23 Mouly, et al., "The GSM System for Mobile Communications"; Roy Want et al.,
24 "The Active Badge Location System," ACM Transactions on Information Systems,
25 Vol. 10, Issue 1, January 1992; Roy Want et al., "An Overview of the ParcTab
26 Ubiquitous Computing Experiment," IEEE Personal Communications, December
27 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
28 in the art would have been motivated to combine or modify the Obradovich Patent

1 in this manner for the reasons explained in Section IV.A and also because the
2 Obradovich Patent and the above-referenced prior art from Appendix H are all
3 directed towards wireless location determining and/or reporting technology.

4 As another example, it would have been obvious to combine or modify the
5 Obradovich Patent to have a network node allow or deny a request for location
6 information, as described by the prior art from Appendix I, including, for example,
7 The ATIS Solution; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
8 5,950,137 to Kim; Andy Harter et al., "A Distributed Location System for the
9 Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to
10 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
11 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to Theimer et
12 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP
13 Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the art
14 would have been motivated to combine or modify the Obradovich Patent in this
15 manner for the reasons explained in Section IV.A and also because the Obradovich
16 Patent and the above-referenced prior art from Appendix I are all directed towards
17 wireless location determining and/or reporting technology.

18 As another example, it would have been obvious to combine or modify the
19 Obradovich Patent to forward information regarding whether to allow or deny a
20 location request from a first node to a second node, as described by the prior art
21 from Appendix L, including, for example, The ATIS Solution; U.S. Patent No.
22 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
23 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
24 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
25 Havinis et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
26 Spreitzer et al., "Architectural Considerations for Scalable, Secure, Mobile
27 Computing with Location Information," IEEE Distributed Computing Systems
28 Conference, June 21-24, 1994. One of ordinary skill in the art would have been

1 motivated to combine or modify the Obradovich Patent in this manner for the
2 reasons explained in Section IV.A and also because the Obradovich Patent and the
3 above-referenced prior art from Appendix L are all directed towards wireless
4 location determining and/or reporting technology.

5 As described above, one of ordinary skill in the art would not have limited
6 himself to a specific technology when making modifications or improvements to
7 the Obradovich Patent, but would have modified the Obradovich Patent with
8 concepts from other wireless location and/or wireless communication solutions of
9 the time. This would have been a result of ordinary innovation, ordinary skill, and
10 common sense and would have been obvious to try and predictable. Moreover,
11 design incentives and other market forces would have prompted those endeavors.

12 **9. JP Patent Publication No. 6189359A (Michihiro)**

13 JP Patent Publication No. 6189359A to Michihiro, entitled "Position
14 Notification Telephone System," was published on July 8, 1994 (the "Michihiro
15 Patent"). The Michihiro Patent is entitled to a priority date at least as early as
16 December 16, 1992. The Michihiro Patent qualifies as prior art under at least 35
17 U.S.C. §§ 102(a) and (b). The chart attached as Exhibit 16 provides examples of
18 where the Michihiro Patent discloses, either expressly or inherently, each element
19 of the Asserted Claims, thereby anticipating those claims.

20 To the extent Plaintiff asserts that the Michihiro Patent does not anticipate
21 the Asserted Claims, it would have been obvious to combine or modify the
22 Michihiro Patent with concepts from other prior art such as, for example, other
23 prior art identified in Section IV and/or Appendices A-R, to render the Asserted
24 Claims invalid, because all of that prior art relates to wireless location and/or
25 wireless communication technology.

26 For example, it would have been obvious to combine or modify the
27 Michihiro Patent to use the methods of authentication described by the prior art
28 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.

1 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
2 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
3 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
4 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
5 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
6 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
7 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
8 No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S.
9 Application Serial No. 08/162,522 to Theimer et al.; International PCT Application
10 No. PCT/US97/11656 to Boltz et al.; and Mike Spreitzer et al., “Architectural
11 Considerations for Scalable, Secure, Mobile Computing with Location
12 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
13 One of ordinary skill in the art would have been motivated to combine or modify
14 the Michihiro Patent in this manner for the reasons explained in Section IV.A and
15 also because the Michihiro Patent and the above-referenced prior art from
16 Appendix D are all directed towards wireless location determining and/or reporting
17 technology.

18 As another example, it would have been obvious to combine or modify the
19 Michihiro Patent to allow location requests from some resources while denying
20 location requests from other resource, as described by the prior art from Appendix
21 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
22 Harter et al., “A Distributed Location System for the Active Office,” Network,
23 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
24 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
25 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
26 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
27 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
28 Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile

1 Computing with Location Information,” IEEE Distributed Computing Systems
2 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
3 motivated to combine or modify the Michihiro Patent in this manner for the reasons
4 explained in Section IV.A and also because the Michihiro Patent and the above-
5 referenced prior art from Appendix E are all directed towards wireless location
6 determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Michihiro Patent to use a profile to allow or deny a request for location information,
9 as described by the prior art from Appendix F, including, for example, The ATIS
10 Solution; U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to
11 Kawamoto; Andy Harter et al., “A Distributed Location System for the Active
12 Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003 to Kingdon
13 et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,564,070 to
14 Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S. Patent No.
15 6,360,102 to Havinis et al. One of ordinary skill in the art would have been
16 motivated to combine or modify the Michihiro Patent in this manner for the reasons
17 explained in Section IV.A and also because the Michihiro Patent and the above-
18 referenced prior art from Appendix F are all directed towards wireless location
19 determining and/or reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 Michihiro Patent to continuously track the location of a mobile unit, as described by
22 the prior art from Appendix G, including, for example, U.S. Patent No. 6,169,902;
23 Andy Harter et al., “A Distributed Location System for the Active Office,”
24 Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,485,163 to Singer et al.; U.S.
25 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070 to Want et al.;
26 U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,486,794 to Calistro,
27 et al.; U.S. Patent No. 5,365,451 to Wang et al.; and International PCT Application
28 No. PCT/US97/11656 to Boltz et al. One of ordinary skill in the art would have

1 been motivated to combine or modify the Michihiro Patent in this manner for the
2 reasons explained in Section IV.A and also because the Michihiro Patent and the
3 above-referenced prior art from Appendix G are all directed towards wireless
4 location determining and/or reporting technology.

5 As another example, it would have been obvious to combine or modify the
6 Michihiro Patent to detect an absence of communication with a mobile unit, as
7 described by the prior art from Appendix H, including, for example, The ATIS
8 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
9 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
10 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
11 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
12 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
13 Mouly, et al., “The GSM System for Mobile Communications”; Roy Want et al.,
14 “The Active Badge Location System,” ACM Transactions on Information Systems,
15 Vol. 10, Issue 1, January 1992; Roy Want et al., “An Overview of the ParcTab
16 Ubiquitous Computing Experiment,” IEEE Personal Communications, December
17 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
18 in the art would have been motivated to combine or modify the Michihiro Patent in
19 this manner for the reasons explained in Section IV.A and also because the
20 Michihiro Patent and the above-referenced prior art from Appendix H are all
21 directed towards wireless location determining and/or reporting technology.

22 As described above, one of ordinary skill in the art would not have limited
23 himself to a specific technology when making modifications or improvements to
24 the Michihiro Patent, but would have modified the Michihiro Patent with concepts
25 from other wireless location and/or wireless communication solutions of the time.
26 This would have been a result of ordinary innovation, ordinary skill, and common
27 sense and would have been obvious to try and predictable. Moreover, design
28 incentives and other market forces would have prompted those endeavors.

10. The ATIS Solution

The Alliance for Telecommunications Industry Solutions references (the “ATIS Solution”) qualifies as prior art at least under 35 U.S.C. §§ 102(a) and (g)(2) because it was known and/or used by others or made by others before the earliest conception date that Plaintiff can establish for the Asserted Claims, and under 35 U.S.C. § 102(b) because it was in public use and/or offered for sale more than one year prior to the priority date of the Asserted Patents. In addition, the ATIS Solution describes systems incorporating elements of the ATIS Solution that qualify as prior art under 35 U.S.C. § 102(g)(2). The ATIS Solution further describes work done by other standard-setting organizations, such as the Telecommunications Industry Association and the European Telecommunications Standards Institute, that qualifies as prior art under at least U.S.C. §§ 102(a) and (b).

Various references, including those identified below, disclose the features and functionalities of the ATIS Solution. Each underlying reference evidencing the ATIS Solution also individually qualifies as prior art. Exhibits 24-25 and 38 provide examples of how the ATIS Solution and associated references disclose, either expressly or inherently, each element of the Asserted Claims, thereby anticipating those claims under 35 U.S.C. § 102, using Plaintiff’s apparent and overbroad constructions of the claims. The following references evidence the ATIS Solution:

Exh.	EVIDENCE FOR THE PRIOR ART ATIS SOLUTION
24	The ATIS Solution
24	Maya Roel-Ng, “Functional Model for GSM Location Services,” T1P1.5, 10/6/1997 (the “T1P1.5 97-375 Contribution”). The T1P1.5 97-375 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).

1	Exh.	EVIDENCE FOR THE PRIOR ART ATIS SOLUTION
2	24	ETSI SMG1 Plenary, "Service Requirements for a Mobile Location Service," ESTI SMG1, March 1997 (the "T1P1.5 97-126 Contribution").
3		The T1P1.5 97-126 Contribution qualifies as prior art under at least 35
4		U.S.C. §§ 102(a) and (b).
5	24	Stephen Hayes, et al. "Network Architecture for GSM Location Services,"
6		T1P1.5, 12/1/1997 (the "T1P1.5 97-474 Contribution"). The T1P1.5 97-
7		474 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a)
8		and (b).
9	24	Siemens Telecom Networks, "Location Services Stage 2 Functional
10		Description Proposal", T1P1.5, 12/2/1997 (the "T1P1.5 97-496
11		Contribution"). The T1P1.5 97-496 Contribution qualifies as prior art
12		under at least 35 U.S.C. §§ 102(a) and (b).
13	24	GSM NA Data/API Sub Group, "Stage 0 Requirements for PCS1900 Value
14		Added Data Services", T1P1.5, 10/9/1997, (the "T1P1.5 97-338
15		Contribution"). The T1P1.5 97-338 Contribution qualifies as prior art
16		under at least 35 U.S.C. §§ 102(a) and (b).
17	24	Siemens Stromberg-Carlson, "Realization of PCS1900 Delats", T1P1.5,
18		5/27/1997, (the "T1P1.5 97-232 Contribution"). The T1P1.5 97-232
19		Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and
20		(b).
21	24	John Hastings, "Recommended GPS Changes to contribution 187R3",
22		T1P1.5, 8/6/1999, (the "T1P1.5 99-545R0 Contribution"). The T1P1.5 99-
23		545R0 Contribution qualifies as prior art under at least 35 U.S.C. §§
24		102(a).
25	24	Stephen Hayes, "Comments on LCS Stage 0", T1P1.5, 12/1/1997, (the
26		"T1P1.5 97-471 Contribution"). The T1P1.5 97-471 Contribution qualifies
27		as prior art under at least 35 U.S.C. §§ 102(a) and (b).
28	24	Don Zelmer, "Liason Statement", T1P1.5, 4/30/1999 (the "T1P1.5 99-
		297R1 Contribution"). The T1P1.5 99-297R1 Contribution qualifies as
		prior art under at least 35 U.S.C. §§ 102(a).

Exh.	EVIDENCE FOR THE PRIOR ART ATIS SOLUTION
24	Stephen Hayes, “Comments on LCS Stage 1”, T1P1.5, 12/1/1997, (the “T1P1.5 97-472 Contribution”). The T1P1.5 97-472 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
24	Bilal Saleh, “Enhanced CAMEL Architecture for Emergency Calls and Location Services Support”, T1P1.5 June, 1997 (the “T1P1.5 97-310 Contribution”). The T1P1.5 97-310 Contribution qualifies as prior art at least under 35 U.S.C. §§ 102(a) and (b).
25	Christopher Kingdon et al., “Location Services and Architecture Proposal”, T1P1.5, 5/27/1997, (the “T1P1.5 97-211 Contribution”). The T1P1.5 97-211 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
25	Christopher Kingdon et al., “Location Services and Architecture Proposal”, T1P1.5, 7/28/1997, (the “T1P1.5 97-211R1 Contribution”). The T1P1.5 97-211R1 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
25	T1P1.5, “Location Services (LCS); Service description, Stage 1”, T1P1.5, 7/1997, (the “T1P1.5 97-211R3 Contribution”). The T1P1.5 97-211R3 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
25	T1P1.5, “Location Services (LCS); Service description, Stage 1”, T1P1.5, 10/1997, (the “ T1P1.5 97-211R5 Contribution”). The T1P1.5 97-211R5 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
25	Christopher Kingdon, “Comments on LCS Stage 1”, T1P1.5, 10/6/1997, (the “T1P1.5 97-374 Contribution”). The T1P1.5 97-374 Contribution qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
38	T1P1.5, “Location Services (LCS); Service description, Stage 1,” T1P1.5/98-104r4, June 1998 (the “T1P1.5/98-104r4 Contribution”). The T1P1.5/98-104r4 Contribution qualifies as prior art at least under 35 U.S.C. § 102(a).

Exh.	EVIDENCE FOR THE PRIOR ART ATIS SOLUTION
38	Vodafone, "Pre-Update Location Service Enquiry (PULSE)" ETSI EP SMG3/SA, 26-28 August 1997 (the "SMG3/SA Contribution"). The SMG3/SA Contribution is prior art under at least 35 U.S.C. § 103.
38	T1P1.5, "Location Services (LCS); Funcational description - Stage 2," T1P1.5/98-105r4, June 1998 (the "T1P1.5/98-105r4 Contribution"). The T1P1.5/98-105r4 Contribution qualifies as prior art under at least 35 U.S.C. § 102(a).
38	T1P1.5, "Location Services (LCS); Functional description - Stage 2," T1P1.5/98-105r9, 1998 (the "T1P1.5/98-105r9 Contribution"). The T1P1.5/98-105r9 Contribution qualifies as prior art under at least 35 U.S.C. § 102(a).

Defendants reserve the right to contend that the references evidencing the ATIS Solution constitute a single reference for purposes of anticipation. Defendants also reserve the right to contend that, if the ATIS Solution references are considered individually, it would have been obvious to combine those references to render the Asserted Claims invalid, because those references, or the information contained therein, all discuss the same subject (*i.e.*, the ATIS Solution).

To the extent any of the references evidencing the ATIS Solution disclose a particular feature, it would have been obvious to combine that feature with other or all of the references evidencing the ATIS Solution to render the Asserted Claims invalid. The reasons or motivation to modify the references evidencing the ATIS Solution in that manner include, for example, the fact that it would have been common sense to apply concepts that were already being described in one reference about the ATIS Solution to another reference about the same solution.

To the extent Plaintiff asserts that the ATIS Solution, or any reference evidencing the ATIS Solution, does not anticipate the Asserted Claims, it would also have been obvious to combine or modify the ATIS Solution, or any reference evidencing the ATIS Solution, with concepts from other prior art such as, for

1 example, other prior art identified in Section IV and/or Appendices A-R, to render
2 the Asserted Claims invalid, because all of that prior art relates to wireless location
3 and/or wireless communication technology.

4 As another example, it would have been obvious to combine or modify the
5 ATIS Solution, or any reference evidencing that system, to identify the source of a
6 location request, as described by the prior art from Appendix B, including, for
7 example, U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
8 Johansson et al.; U.S. Patent No. 5,946,626 to Foadare et al.; U.S. Patent No.
9 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S.
10 Application Serial No. 08/162,522 to Theimer et al.; JP Patent Publication No.
11 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural Considerations
12 for Scalable, Secure, Mobile Computing with Location Information," IEEE
13 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
14 skill in the art would have been motivated to combine or modify the ATIS Solution
15 in this manner for the reasons explained in Section IV.A and also because the ATIS
16 Solution and the above-referenced prior art from Appendix B are all directed
17 towards wireless location determining and/or reporting technology.

18 As another example, it would have been obvious to combine or modify the
19 ATIS Solution, or any reference evidencing that system, to transmit a location
20 request and the identification of the source of the request to a mobile unit and to
21 receive authorization from the mobile unit to allow or deny the request, as
22 described by the prior art from Appendix C, including, for example, U.S. Patent
23 No. 6,442,391 to Johansson et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
24 International PCT Application No. PCT/US97/11656 to Boltz et al.; and JP Patent
25 Publication No. 6189359A to Michihiro. One of ordinary skill in the art would
26 have been motivated to combine or modify the ATIS Solution in this manner for the
27 reasons explained in Section IV.A and also because the ATIS Solution and the
28

1 above-referenced prior art from Appendix C are all directed towards wireless
2 location determining and/or reporting technology.

3 As another example, it would have been obvious to combine or modify the
4 ATIS Solution, or any reference evidencing that system, to use the methods of
5 authentication described by the prior art from Appendix D, including, for example,
6 U.S. Patent No. 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S.
7 Patent No. 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et
8 al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to
9 Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
10 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent
11 No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
12 Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.;
13 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
14 U.S. Application Serial No. 08/162,522 to Theimer et al.; International PCT
15 Application No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No.
16 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural Considerations
17 for Scalable, Secure, Mobile Computing with Location Information," IEEE
18 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
19 skill in the art would have been motivated to combine or modify the ATIS Solution
20 in this manner for the reasons explained in Section IV.A and also because the ATIS
21 Solution and the above-referenced prior art from Appendix D are all directed
22 towards wireless location determining and/or reporting technology.

23 As another example, it would have been obvious to combine or modify the
24 ATIS Solution, or any reference evidencing that system, to allow location requests
25 from some resources while denying location requests from other resource, as
26 described by the prior art from Appendix E, including, for example, U.S. Patent No.
27 5,950,137; Andy Harter et al., "A Distributed Location System for the Active
28 Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara

1 et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
2 Johansson et al.; U.S. Patent No. 5,946,626 to Foadare et al.; U.S. Patent No.
3 5,731,785 to Lemelson et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
4 Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to
5 Theimer et al.; and Mike Spreitzer et al., “Architectural Considerations for
6 Scalable, Secure, Mobile Computing with Location Information,” IEEE Distributed
7 Computing Systems Conference, June 21-24, 1994. One of ordinary skill in the art
8 would have been motivated to combine or modify the ATIS Solution in this manner
9 for the reasons explained in Section IV.A and also because the ATIS Solution and
10 the above-referenced prior art from Appendix E are all directed towards wireless
11 location determining and/or reporting technology.

12 As another example, it would have been obvious to combine or modify the
13 ATIS Solution, or any reference evidencing that system, to use a profile to allow or
14 deny a request for location information, as described by the prior art from Appendix
15 F, including, for example, U.S. Patent No. 5,950,137 to Kim; U.S. Patent No.
16 6,169,902 to Kawamoto; Andy Harter et al., “A Distributed Location System for
17 the Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 6,138,003
18 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
19 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; and U.S.
20 Patent No. 6,360,102 to Havinis et al. One of ordinary skill in the art would have
21 been motivated to combine or modify the ATIS Solution in this manner for the
22 reasons explained in Section IV.A and also because the ATIS Solution and the
23 above-referenced prior art from Appendix F are all directed towards wireless
24 location determining and/or reporting technology.

25 As another example, it would have been obvious to combine or modify the
26 ATIS Solution, or any reference evidencing that system, to continuously track the
27 location of a mobile unit, as described by the prior art from Appendix G, including,
28 for example, U.S. Patent No. 6,169,902; Andy Harter et al., “A Distributed

1 Location System for the Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S.
2 Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.;
3 U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et
4 al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 5,365,451 to Wang
5 et al.; and International PCT Application No. PCT/US97/11656 to Boltz et al. One
6 of ordinary skill in the art would have been motivated to combine or modify the
7 ATIS Solution in this manner for the reasons explained in Section IV.A and also
8 because the ATIS Solution and the above-referenced prior art from Appendix G are
9 all directed towards wireless location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 ATIS Solution, or any reference evidencing that system, to detect an absence of
12 communication with a mobile unit, as described by the prior art from Appendix H,
13 including, for example, U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No.
14 6,442,391 to Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S.
15 Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S.
16 Patent No. 5,493,692 to Theimer et al.; International PCT Application No.
17 PCT/US97/11656 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A
18 Specification; M. Mouly, et al., “The GSM System for Mobile Communications”;
19 Roy Want et al., “The Active Badge Location System,” ACM Transactions on
20 Information Systems, Vol. 10, Issue 1, January 1992; Roy Want et al., “An
21 Overview of the ParcTab Ubiquitous Computing Experiment,” IEEE Personal
22 Communications, December 1995; and JP Patent Publication No. 9147291A to
23 Yoshiyuki. One of ordinary skill in the art would have been motivated to combine
24 or modify the ATIS Solution in this manner for the reasons explained in Section
25 IV.A and also because the ATIS Solution and the above-referenced prior art from
26 Appendix H are all directed towards wireless location determining and/or reporting
27 technology.

1 As another example, it would have been obvious to combine or modify the
2 ATIS Solution, or any reference evidencing that system, to have a network node
3 allow or deny a request for location information, as described by the prior art from
4 Appendix I, including, for example, U.S. Patent No. 6,169,902 to Kawamoto; U.S.
5 Patent No. 5,950,137 to Kim; Andy Harter et al., "A Distributed Location System
6 for the Active Office," Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No.
7 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
8 Patent No. 5,946,626 to Foladare et al.; U.S. Application Serial No. 08/162,522 to
9 Theimer et al.; International PCT Application No. PCT/US97/11656 to Boltz et al.;
10 and JP Patent Publication No. 6189359A to Michihiro. One of ordinary skill in the
11 art would have been motivated to combine or modify the ATIS Solution in this
12 manner for the reasons explained in Section IV.A and also because the ATIS
13 Solution and the above-referenced prior art from Appendix I are all directed
14 towards wireless location determining and/or reporting technology.

15 As another example, it would have been obvious to combine or modify the
16 ATIS Solution, or any reference evidencing that system, to have a mobile unit allow
17 or deny a request for location information, as described by the prior art from
18 Appendix J, including, for example, U.S. Patent No. 6,442,391 to Johansson et al.;
19 U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis
20 et al.; JP Patent Publication No. 6189359A to Michihiro; and JP Patent Publication
21 No. 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
22 motivated to combine or modify the ATIS Solution in this manner for the reasons
23 explained in Section IV.A and also because the ATIS Solution and the above-
24 referenced prior art from Appendix J are all directed towards wireless location
25 determining and/or reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 ATIS Solution, or any reference evidencing that system, to obtain the identification
28 of a mobile unit whose location has been requested, as described by the prior art

1 from Appendix K, including, for example, U.S. Patent No. 5,963,866 to Palamara et
2 al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
3 Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Patent No.
4 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent
5 No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et al.;
6 International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
7 Publication No. 6189359A to Michihiro; Mike Spreitzer et al., “Architectural
8 Considerations for Scalable, Secure, Mobile Computing with Location
9 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994;
10 and the GSM Specification. One of ordinary skill in the art would have been
11 motivated to combine or modify the ATIS Solution in this manner for the reasons
12 explained in Section IV.A and also because the ATIS Solution and the above-
13 referenced prior art from Appendix K are all directed towards wireless location
14 determining and/or reporting technology.

15 As another example, it would have been obvious to combine or modify the
16 ATIS Solution, or any reference evidencing that system, to forward information
17 regarding whether to allow or deny a location request from a first node to a second
18 node, as described by the prior art from Appendix L, including, for example, U.S.
19 Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et
20 al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to
21 Lemelson et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
22 6,360,102 to Havinis et al.; JP Patent Publication No. 6189359A to Michihiro; and
23 Mike Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile
24 Computing with Location Information,” IEEE Distributed Computing Systems
25 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
26 motivated to combine or modify the ATIS Solution in this manner for the reasons
27 explained in Section IV.A and also because the ATIS Solution and the above-
28

1 referenced prior art from Appendix L are all directed towards wireless location
2 determining and/or reporting technology.

3 One of ordinary skill in the art would not have limited himself when making
4 modifications to the ATIS Solution to concepts solely implemented in or discussed
5 with reference to the ATIS Solution. Rather, one of ordinary skill also would have
6 considered the concepts from other wireless location and/or wireless
7 communication solutions of the time. This would have been a result of ordinary
8 innovation, ordinary skill, and common sense and would have been obvious to try
9 and predictable. Moreover, design incentives and other market forces would have
10 prompted those endeavors.

11 **11. U.S. Patent No. 5,950,137 (Kim)**

12 U.S. Patent No. 5,950,137 to Kim entitled “Method for Supplying Subscriber
13 Location Information in a Mobile Communications System,” issued on September
14 7, 1997 (the “Kim Patent”). The Kim Patent is entitled to a priority date at least as
15 early as September 16, 1997. The Kim Patent qualifies as prior art under at least 35
16 U.S.C. § 102(e). The chart attached as Exhibit 26 provides examples of where the
17 Kim Patent discloses, either expressly or inherently, each element of the Asserted
18 Claims, thereby anticipating those claims.

19 To the extent Plaintiff asserts that the Kim Patent does not anticipate the
20 Asserted Claims, it would have been obvious to combine or modify the Kim Patent
21 with concepts from other prior art such as, for example, other prior art identified in
22 Section IV and/or Appendices A-R, to render the Asserted Claims invalid, because
23 all of that prior art relates to wireless location and/or wireless communication
24 technology.

25 For example, it would have been obvious to combine or modify the Kim
26 Patent to identify the source of a location request, as described by the prior art from
27 Appendix B, including, for example, U.S. Patent No. 6,138,003 to Kingdon et al.;
28 U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to

1 Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
2 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et
3 al.; JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,
4 “Architectural Considerations for Scalable, Secure, Mobile Computing with
5 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
6 24, 1994. One of ordinary skill in the art would have been motivated to combine or
7 modify the Kim Patent in this manner for the reasons explained in Section IV.A and
8 also because the Kim Patent and the above-referenced prior art from Appendix B
9 are all directed towards wireless location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Kim Patent to transmit a location request and the identification of the source of the
12 request to a mobile unit and to receive authorization from the mobile unit to allow
13 or deny the request, as described by the prior art from Appendix C, including, for
14 example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 6,360,102
15 to Havinis et al.; International PCT Application No. PCT/US97/11656 to Boltz et
16 al.; and JP Patent Publication No. 6189359A to Michihiro. One of ordinary skill in
17 the art would have been motivated to combine or modify the Kim Patent in this
18 manner for the reasons explained in Section IV.A and also because the Kim Patent
19 and the above-referenced prior art from Appendix C are all directed towards
20 wireless location determining and/or reporting technology.

21 As another example, it would have been obvious to combine or modify the
22 Kim Patent to use the methods of authentication described by the prior art from
23 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
24 6,169,902 to Kawamoto; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
25 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
26 Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et
27 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
28 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to

1 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
2 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
3 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
4 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
5 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
6 Considerations for Scalable, Secure, Mobile Computing with Location
7 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
8 One of ordinary skill in the art would have been motivated to combine or modify
9 the Kim Patent in this manner for the reasons explained in Section IV.A and also
10 because the Kim Patent and the above-referenced prior art from Appendix D are all
11 directed towards wireless location determining and/or reporting technology.

12 As another example, it would have been obvious to combine or modify the
13 Kim Patent to use a profile to allow or deny a request for location information, as
14 described by the prior art from Appendix F, including, for example, The ATIS
15 Solution; U.S. Patent No. 6,169,902 to Kawamoto; Andy Harter et al., “A
16 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
17 1994; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
18 Johansson et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
19 5,493,692 to Theimer et al.; and U.S. Patent No. 6,360,102 to Havinis et al. One of
20 ordinary skill in the art would have been motivated to combine or modify the Kim
21 Patent in this manner for the reasons explained in Section IV.A and also because
22 the Kim Patent and the above-referenced prior art from Appendix F are all directed
23 towards wireless location determining and/or reporting technology.

24 As another example, it would have been obvious to combine or modify the
25 Kim Patent, or any reference evidencing that system, to continuously track the
26 location of a mobile unit, as described by the prior art from Appendix G, including,
27 for example, U.S. Patent No. 6,169,902; Andy Harter et al., “A Distributed
28 Location System for the Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S.

1 Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.;
2 U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et
3 al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 5,365,451 to Wang
4 et al.; and International PCT Application No. PCT/US97/11656 to Boltz et al. One
5 of ordinary skill in the art would have been motivated to combine or modify the
6 Kim Patent in this manner for the reasons explained in Section IV.A and also
7 because the ATIS Solution and the above-referenced prior art from Appendix G are
8 all directed towards wireless location determining and/or reporting technology.

9 As another example, it would have been obvious to combine or modify the
10 Kim Patent to detect an absence of communication with a mobile unit, as described
11 by the prior art from Appendix H, including, for example, The ATIS Solution; U.S.
12 Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to Johansson et al.;
13 U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer
14 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
15 Theimer et al.; International PCT Application No. PCT/US97/11656 to Boltz et al.;
16 the GSM Specification; the TIA/EIA/IS-95-A Specification; M. Mouly, et al., "The
17 GSM System for Mobile Communications"; Roy Want et al., "The Active Badge
18 Location System," ACM Transactions on Information Systems, Vol. 10, Issue 1,
19 January 1992; Roy Want et al., "An Overview of the ParcTab Ubiquitous
20 Computing Experiment," IEEE Personal Communications, December 1995; and JP
21 Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill in the art
22 would have been motivated to combine or modify the Kim Patent in this manner for
23 the reasons explained in Section IV.A and also because the Kim Patent and the
24 above-referenced prior art from Appendix H are all directed towards wireless
25 location determining and/or reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 Kim Patent, or any reference evidencing that system, to have a mobile unit allow or
28 deny a request for location information, as described by the prior art from Appendix

1 J, including, for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent
2 No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis et al.; JP
3 Patent Publication No. 6189359A to Michihiro; and JP Patent Publication No.
4 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
5 motivated to combine or modify the Kim Patent in this manner for the reasons
6 explained in Section IV.A and also because the Kim Patent and the above-
7 referenced prior art from Appendix J are all directed towards wireless location
8 determining and/or reporting technology.

9 As another example, it would have been obvious to combine or modify the
10 Kim Patent to forward information regarding whether to allow or deny a location
11 request from a first node to a second node, as described by the prior art from
12 Appendix L, including, for example, The ATIS Solution; U.S. Patent No. 6,138,003
13 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
14 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S.
15 Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.;
16 JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al.,
17 “Architectural Considerations for Scalable, Secure, Mobile Computing with
18 Location Information,” IEEE Distributed Computing Systems Conference, June 21-
19 24, 1994. One of ordinary skill in the art would have been motivated to combine or
20 modify the Kim Patent in this manner for the reasons explained in Section IV.A and
21 also because the Kim Patent and the above-referenced prior art from Appendix L
22 are all directed towards wireless location determining and/or reporting technology.

23 As described above, one of ordinary skill in the art would not have limited
24 himself to a specific technology when making modifications or improvements to
25 the Kim Patent, but would have modified the Kim Patent with concepts from other
26 wireless location and/or wireless communication solutions of the time. This would
27 have been a result of ordinary innovation, ordinary skill, and common sense and
28

1 would have been obvious to try and predictable. Moreover, design incentives and
2 other market forces would have prompted those endeavors.

3 **12. U.S. Patent No. 6,169,902 (Kawamoto)**

4 U.S. Patent No. 6,169,902 to Kawamoto entitled “Information Terminal,
5 Processing Method by Information Terminal, Information Providing Apparatus and
6 Information Network System,” issued on January 2, 2001 (the “Kawamoto
7 Patent”). The Kawamoto Patent is entitled to a priority date at least as early as
8 April 8, 1998. The Kawamoto Patent qualifies as prior art under at least 35 U.S.C.
9 § 102(e). The chart attached as Exhibit 27 provides examples of where the
10 Kawamoto Patent discloses, either expressly or inherently, each element of the
11 Asserted Claims, thereby anticipating those claims.

12 To the extent Plaintiff asserts that the Kawamoto Patent does not anticipate
13 the Asserted Claims, it would have been obvious to combine or modify the
14 Kawamoto Patent with concepts from other prior art such as, for example, other
15 prior art identified in Section IV and/or Appendices A-R, to render the Asserted
16 Claims invalid, because all of that prior art relates to wireless location and/or
17 wireless communication technology.

18 As another example, it would have been obvious to combine or modify the
19 Kawamoto Patent to transmit a location request and the identification of the source
20 of the request to a mobile unit and to receive authorization from the mobile unit to
21 allow or deny the request, as described by the prior art from Appendix C, including,
22 for example, U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
23 6,360,102 to Havinis et al.; International PCT Application No. PCT/US97/11656 to
24 Boltz et al.; and JP Patent Publication No. 6189359A to Michihiro. One of
25 ordinary skill in the art would have been motivated to combine or modify the
26 Kawamoto Patent in this manner for the reasons explained in Section IV.A and also
27 because the Kawamoto Patent and the above-referenced prior art from Appendix C
28 are all directed towards wireless location determining and/or reporting technology.

1 As another example, it would have been obvious to combine or modify the
2 Kawamoto Patent to use the methods of authentication described by the prior art
3 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
4 5,950,137 to Kim; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No.
5 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
6 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et
7 al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins
8 et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No. 5,493,692 to
9 Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No.
10 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
11 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
12 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
13 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural
14 Considerations for Scalable, Secure, Mobile Computing with Location
15 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.
16 One of ordinary skill in the art would have been motivated to combine or modify
17 the Kawamoto Patent in this manner for the reasons explained in Section IV.A and
18 also because the Kawamoto Patent and the above-referenced prior art from
19 Appendix D are all directed towards wireless location determining and/or reporting
20 technology.

21 As another example, it would have been obvious to combine or modify the
22 Kawamoto Patent to allow location requests from some resources while denying
23 location requests from other resource, as described by the prior art from Appendix
24 E, including, for example, The ATIS Solution; U.S. Patent No. 5,950,137; Andy
25 Harter et al., "A Distributed Location System for the Active Office," Network,
26 IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent
27 No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S.
28 Patent No. 5,946,626 to Foadare et al.; U.S. Patent No. 5,731,785 to Lemelson et

1 al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to
2 Havinis et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; and Mike
3 Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile
4 Computing with Location Information,” IEEE Distributed Computing Systems
5 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
6 motivated to combine or modify the Kawamoto Patent in this manner for the
7 reasons explained in Section IV.A and also because the Kawamoto Patent and the
8 above-referenced prior art from Appendix E are all directed towards wireless
9 location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Kawamoto Patent to use a profile to allow or deny a request for location
12 information, as described by the prior art from Appendix F, including, for example,
13 The ATIS Solution; U.S. Patent No. 5,950,137 to Kim; Andy Harter et al., “A
14 Distributed Location System for the Active Office,” Network, IEEE Vol. 8 No. 1,
15 1994; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
16 Johansson et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
17 5,493,692 to Theimer et al.; and U.S. Patent No. 6,360,102 to Havinis et al. One of
18 ordinary skill in the art would have been motivated to combine or modify the
19 Kawamoto Patent in this manner for the reasons explained in Section IV.A and also
20 because the Kawamoto Patent and the above-referenced prior art from Appendix F
21 are all directed towards wireless location determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Kawamoto Patent, or any reference evidencing that system, to continuously track
24 the location of a mobile unit, as described by the prior art from Appendix G,
25 including, for example, Andy Harter et al., “A Distributed Location System for the
26 Active Office,” Network, IEEE Vol. 8 No. 1, 1994; U.S. Patent No. 5,485,163 to
27 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
28 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.

1 6,486,794 to Calistro, et al.; U.S. Patent No. 5,365,451 to Wang et al.; and
2 International PCT Application No. PCT/US97/11656 to Boltz et al. One of
3 ordinary skill in the art would have been motivated to combine or modify the
4 Kawamoto Patent in this manner for the reasons explained in Section IV.A and also
5 because the Kawamoto Patent and the above-referenced prior art from Appendix G
6 are all directed towards wireless location determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Kawamoto Patent to detect an absence of communication with a mobile unit, as
9 described by the prior art from Appendix H, including, for example, The ATIS
10 Solution; U.S. Patent No. 5,504,491 to Chapman; U.S. Patent No. 6,442,391 to
11 Johansson et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No.
12 5,485,163 to Singer et al.; U.S. Patent No. 5,564,070 to Want et al.; U.S. Patent No.
13 5,493,692 to Theimer et al.; International PCT Application No. PCT/US97/11656
14 to Boltz et al.; the GSM Specification; the TIA/EIA/IS-95-A Specification; M.
15 Mouly, et al., "The GSM System for Mobile Communications"; Roy Want et al.,
16 "The Active Badge Location System," ACM Transactions on Information Systems,
17 Vol. 10, Issue 1, January 1992; Roy Want et al., "An Overview of the ParcTab
18 Ubiquitous Computing Experiment," IEEE Personal Communications, December
19 1995; and JP Patent Publication No. 9147291A to Yoshiyuki. One of ordinary skill
20 in the art would have been motivated to combine or modify the Kawamoto Patent in
21 this manner for the reasons explained in Section IV.A and also because the
22 Kawamoto Patent and the above-referenced prior art from Appendix H are all
23 directed towards wireless location determining and/or reporting technology.

24 As another example, it would have been obvious to combine or modify the
25 Kawamoto Patent, or any reference evidencing that system, to have a mobile unit
26 allow or deny a request for location information, as described by the prior art from
27 Appendix J, including, for example, U.S. Patent No. 6,442,391 to Johansson et al.;
28 U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 6,360,102 to Havinis

1 et al.; JP Patent Publication No. 6189359A to Michihiro; and JP Patent Publication
2 No. 9147291A to Yoshiyuki. One of ordinary skill in the art would have been
3 motivated to combine or modify the Kawamoto Patent in this manner for the
4 reasons explained in Section IV.A and also because the Kawamoto Patent and the
5 above-referenced prior art from Appendix J are all directed towards wireless
6 location determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Kawamoto Patent, or any reference evidencing that system, to obtain the
9 identification of a mobile unit whose location has been requested, as described by
10 the prior art from Appendix K, including, for example, U.S. Patent No. 5,963,866
11 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No.
12 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S.
13 Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.;
14 U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et
15 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
16 Publication No. 6189359A to Michihiro; Mike Spreitzer et al., “Architectural
17 Considerations for Scalable, Secure, Mobile Computing with Location
18 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994;
19 and the GSM Specification. One of ordinary skill in the art would have been
20 motivated to combine or modify the Kawamoto Patent in this manner for the
21 reasons explained in Section IV.A and also because the Kawamoto Patent and the
22 above-referenced prior art from Appendix K are all directed towards wireless
23 location determining and/or reporting technology.

24 As described above, one of ordinary skill in the art would not have limited
25 himself to a specific technology when making modifications or improvements to
26 the Kawamoto Patent, but would have modified the Kawamoto Patent with
27 concepts from other wireless location and/or wireless communication solutions of
28 the time. This would have been a result of ordinary innovation, ordinary skill, and

1 common sense and would have been obvious to try and predictable. Moreover,
2 design incentives and other market forces would have prompted those endeavors.

3 **13. U.S. Patent No. 5,504,491 (Chapman)**

4 U.S. Patent No. 5,504,491 to Chapman entitled “Global Status and Position
5 Reporting System,” issued on April 2, 1996 (the “Chapman Patent”). The
6 Chapman Patent is entitled to a priority date at least as early as April 25, 1994. The
7 Chapman Patent qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b).
8 The chart attached as Exhibit 28 provides examples of where the Chapman Patent
9 discloses, either expressly or inherently, each element of the Asserted Claims,
10 thereby anticipating those claims.

11 To the extent Plaintiff asserts that the Chapman Patent does not anticipate the
12 Asserted Claims, it would have been obvious to combine or modify the Chapman
13 Patent with concepts from other prior art such as, for example, other prior art
14 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
15 invalid, because all of that prior art relates to wireless location and/or wireless
16 communication technology.

17 As described above, one of ordinary skill in the art would not have limited
18 himself to a specific technology when making modifications or improvements to
19 the Chapman Patent, but would have modified the Chapman Patent with concepts
20 from other wireless location and/or wireless communication solutions of the time.
21 This would have been a result of ordinary innovation, ordinary skill, and common
22 sense and would have been obvious to try and predictable. Moreover, design
23 incentives and other market forces would have prompted those endeavors.

E. The Asserted Claims of the ‘273 Patent are Invalid Based on the Prior Art

1. U.S. Patent No. 5,365,451 (Wang et al.)

U.S. Patent No. 5,365,451 to Wang et al., entitled “Mobile Unit Tracking System,” issued on November 15, 1994 (the “Wang Patent”). The Wang Patent is entitled to a priority date at least as early as December 9, 1991. The Wang Patent qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (b). The chart attached as Exhibit 17 provides examples of where the Wang Patent discloses, either expressly or inherently, each element of the Asserted Claims, thereby anticipating those claims.

To the extent Plaintiff asserts that the Wang Patent does not anticipate the Asserted Claims, it would have been obvious to combine or modify the Wang Patent with concepts from other prior art such as, for example, other prior art identified in Section IV and/or Appendices A-R, to render the Asserted Claims invalid, because all of that prior art relates to wireless location and/or wireless communication technology.

For example, it would have been obvious to combine or modify the Wang Patent to receive a request for location information, as described by the prior art from Appendix A, including, for example, U.S. Patent No. 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural Considerations

1 for Scalable, Secure, Mobile Computing with Location Information,” IEEE
2 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
3 skill in the art would have been motivated to combine or modify the Wang Patent in
4 this manner for the reasons explained in Section IV.A and also because the Wang
5 Patent and the above-referenced prior art from Appendix A are all directed towards
6 wireless location determining and/or reporting technology.

7 As another example, it would have been obvious to combine or modify the
8 Wang Patent to identify the source of a location request, as described by the prior
9 art from Appendix B, including, for example, U.S. Patent No. 6,138,003 to
10 Kingdon et al.; U.S. Patent No. 6,442,391 to Johansson et al.; U.S. Patent No.
11 5,946,626 to Foladare et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
12 Patent No. 6,360,102 to Havinis et al.; U.S. Application Serial No. 08/162,522 to
13 Theimer et al.; JP Patent Publication No. 6189359A to Michihiro; and Mike
14 Spreitzer et al., “Architectural Considerations for Scalable, Secure, Mobile
15 Computing with Location Information,” IEEE Distributed Computing Systems
16 Conference, June 21-24, 1994. One of ordinary skill in the art would have been
17 motivated to combine or modify the Wang Patent in this manner for the reasons
18 explained in Section IV.A and also because the Wang Patent and the above-
19 referenced prior art from Appendix B are all directed towards wireless location
20 determining and/or reporting technology.

21 As described above, one of ordinary skill in the art would not have limited
22 himself to a specific technology when making modifications or improvements to
23 the Wang Patent, but would have modified the Wang Patent with concepts from
24 other wireless location and/or wireless communication solutions of the time. This
25 would have been a result of ordinary innovation, ordinary skill, and common sense
26 and would have been obvious to try and predictable. Moreover, design incentives
27 and other market forces would have prompted those endeavors.

1 **2. U.S. Patent No. 5,732,387 (Armbruster et al.)**

2 U.S. Patent No. 5,732,387 to Armbruster et al., entitled “Method and
3 Apparatus for Call Establishment in a Satellite Communication System,” issued on
4 March 24, 1998 (the “Armbruster Patent”). The Armbruster Patent is entitled to a
5 priority date at least as early as December 4, 1995. The Armbruster Patent qualifies
6 as prior art under at least 35 U.S.C. § 102(e). The chart attached as Exhibit 18
7 provides examples of where the Armbruster Patent discloses, either expressly or
8 inherently, each element of the Asserted Claims, thereby anticipating those claims.

9 To the extent Plaintiff asserts that the Armbruster Patent does not anticipate
10 the Asserted Claims, it would have been obvious to combine or modify the
11 Armbruster Patent with concepts from other prior art such as, for example, other
12 prior art identified in Section IV and/or Appendices A-R, to render the Asserted
13 Claims invalid, because all of that prior art relates to wireless location and/or
14 wireless communication technology.

15 For example, it would have been obvious to combine or modify the
16 Armbruster Patent to receive a request for location information, as described by the
17 prior art from Appendix A, including, for example, U.S. Patent No. 5,963,866 to
18 Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No.
19 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S.
20 Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.;
21 U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer
22 et al.; U.S. Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to
23 Loomis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No.
24 6,199,045 to Giniger et al.; U.S. Application Serial No. 08/162,522 to Theimer et
25 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
26 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
27 Considerations for Scalable, Secure, Mobile Computing with Location
28 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.

1 One of ordinary skill in the art would have been motivated to combine or modify
2 the Armbruster Patent in this manner for the reasons explained in Section IV.A and
3 also because the Armbruster Patent and the above-referenced prior art from
4 Appendix A are all directed towards wireless location determining and/or reporting
5 technology.

6 As another example, it would have been obvious to combine or modify the
7 Armbruster Patent to use the methods of authentication described by the prior art
8 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
9 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
10 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
11 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
12 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
13 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
14 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
15 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
16 No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S.
17 Application Serial No. 08/162,522 to Theimer et al.; International PCT Application
18 No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to
19 Michihiro; and Mike Spreitzer et al., "Architectural Considerations for Scalable,
20 Secure, Mobile Computing with Location Information," IEEE Distributed
21 Computing Systems Conference, June 21-24, 1994. It would also have been
22 obvious to combine or modify the Armbruster Patent to use the methods of
23 authentication described by the prior art from Appendix R, including, for example,
24 U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to Wang, W.O.
25 Publication No. 2001/031965 to Willehadson, U.S. Patent Publication No.
26 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567 to Spaargaren.
27 One of ordinary skill in the art would have been motivated to combine or modify
28 the Armbruster Patent in this manner for the reasons explained in Section IV.A and

1 also because the Armbruster Patent and the above-referenced prior art from
2 Appendices D and R are all directed towards wireless location determining and/or
3 reporting technology.

4 As another example, it would have been obvious to combine or modify the
5 Armbruster Patent to have a mobile unit verify when it last provided its location
6 information to a communication system, as described by the prior art from
7 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
8 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.
9 2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No.
10 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958
11 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art
12 would have been motivated to combine or modify the Armbruster Patent in this
13 manner for the reasons explained in Section IV.A and also because the Armbruster
14 Patent and the above-referenced prior art from Appendix M are all directed towards
15 wireless location determining and/or reporting technology.

16 As described above, one of ordinary skill in the art would not have limited
17 himself to a specific technology when making modifications or improvements to
18 the Armbruster Patent, but would have modified the Armbruster Patent with
19 concepts from other wireless location and/or wireless communication solutions of
20 the time. This would have been a result of ordinary innovation, ordinary skill, and
21 common sense and would have been obvious to try and predictable. Moreover,
22 design incentives and other market forces would have prompted those endeavors.

23 **3. U.S. Patent No. 5,774,802 (Tell et al.)**

24 U.S. Patent No. 5,774,802 to Tell et al., entitled “Apparatus and Method for
25 Billing in a Wireless Communication System,” issued on June 30, 1998 (the “Tell
26 Patent”). The Tell Patent is entitled to a priority date at least as early as April 10,
27 1996. The Tell Patent qualifies as prior art under at least 35 U.S.C. § 102(e). The
28 chart attached as Exhibit 19 provides examples of where the Tell Patent discloses,

1 either expressly or inherently, each element of the Asserted Claims, thereby
2 anticipating those claims.

3 To the extent Plaintiff asserts that the Tell Patent does not anticipate the
4 Asserted Claims, it would have been obvious to combine or modify the Tell Patent
5 with concepts from other prior art such as, for example, other prior art identified in
6 Section IV and/or Appendices A-R, to render the Asserted Claims invalid, because
7 all of that prior art relates to wireless location and/or wireless communication
8 technology.

9 For example, it would have been obvious to combine or modify the Tell
10 Patent to receive a request for location information, as described by the prior art
11 from Appendix A, including, for example, U.S. Patent No. 5,963,866 to Palamara et
12 al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
13 Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et al.; U.S. Patent No.
14 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent
15 No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
16 Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et al.;
17 U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger
18 et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; International PCT
19 Application No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No.
20 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural Considerations
21 for Scalable, Secure, Mobile Computing with Location Information,” IEEE
22 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
23 skill in the art would have been motivated to combine or modify the Tell Patent in
24 this manner for the reasons explained in Section IV.A and also because the Tell
25 Patent and the above-referenced prior art from Appendix A are all directed towards
26 wireless location determining and/or reporting technology.

27 As another example, it would have been obvious to combine or modify the
28 Tell Patent to use the methods of authentication described by the prior art from

1 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
2 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
3 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
4 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
5 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
6 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
7 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
8 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
9 No. 6,199,045 to Giniger et al.; U.S. Application Serial No. 08/162,522 to Theimer
10 et al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
11 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
12 Considerations for Scalable, Secure, Mobile Computing with Location
13 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
14 It would also have been obvious to combine or modify the Tell Patent to use the
15 methods of authentication described by the prior art from Appendix R, including,
16 for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to
17 Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent Publication
18 No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567 to
19 Spaargaren. One of ordinary skill in the art would have been motivated to combine
20 or modify the Tell Patent in this manner for the reasons explained in Section IV.A
21 and also because the Tell Patent and the above-referenced prior art from
22 Appendices D and R are all directed towards wireless location determining and/or
23 reporting technology.

24 As another example, it would have been obvious to combine or modify the
25 Tell Patent to have a mobile unit verify when it last provided its location
26 information to a communication system, as described by the prior art from
27 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
28 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.

2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art would have been motivated to combine or modify the Tell Patent in this manner for the reasons explained in Section IV.A and also because the Tell Patent and the above-referenced prior art from Appendix M are all directed towards wireless location determining and/or reporting technology.

As described above, one of ordinary skill in the art would not have limited himself to a specific technology when making modifications or improvements to the Tell Patent, but would have modified the Tell Patent with concepts from other wireless location and/or wireless communication solutions of the time. This would have been a result of ordinary innovation, ordinary skill, and common sense and would have been obvious to try and predictable. Moreover, design incentives and other market forces would have prompted those endeavors.

4. U.S. Patent No. 6,199,045 (Giniger et al.)

U.S. Patent No. 6,199,045 to Giniger et al., entitled “Method and Apparatus for Providing Position-Related Information to Mobile Recipients,” issued on March 6, 2001 (the “Giniger Patent”). The Giniger Patent is entitled to a priority date at least as early as August 15, 1996. The Giniger Patent qualifies as prior art under at least 35 U.S.C. § 102(e). The chart attached as Exhibit 20 provides examples of where the Giniger Patent discloses, either expressly or inherently, each element of the Asserted Claims, thereby anticipating those claims.

To the extent Plaintiff asserts that the Giniger Patent does not anticipate the Asserted Claims, it would have been obvious to combine or modify the Giniger Patent with concepts from other prior art such as, for example, other prior art identified in Section IV and/or Appendices A-R, to render the Asserted Claims invalid, because all of that prior art relates to wireless location and/or wireless communication technology.

1 For example, it would have been obvious to combine or modify the Giniger
2 Patent to use the methods of authentication described by the prior art from
3 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
4 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
5 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
6 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
7 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
8 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
9 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
10 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
11 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
12 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
13 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
14 Considerations for Scalable, Secure, Mobile Computing with Location
15 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
16 It would also have been obvious to combine or modify the Giniger Patent to use the
17 methods of authentication described by the prior art from Appendix R, including,
18 for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to
19 Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent Publication
20 No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567 to
21 Spaargaren. One of ordinary skill in the art would have been motivated to combine
22 or modify the Giniger Patent in this manner for the reasons explained in Section
23 IV.A and also because the Giniger Patent and the above-referenced prior art from
24 Appendices D and R are all directed towards wireless location determining and/or
25 reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 Giniger Patent to have a mobile unit verify when it last provided its location
28 information to a communication system, as described by the prior art from

1 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
2 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.
3 2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No.
4 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958
5 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art
6 would have been motivated to combine or modify the Giniger Patent in this manner
7 for the reasons explained in Section IV.A and also because the Giniger Patent and
8 the above-referenced prior art from Appendix M are all directed towards wireless
9 location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Giniger Patent to use a time stamp to verify that a predetermined period of time has
12 lapsed since the location information of a mobile unit was last updated, as described
13 by the prior art from Appendix O, including, for example, U.S. Patent No.
14 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.
15 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; U.S.
16 Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang et al.; U.S.
17 Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin, "Determining the User
18 Locations for Personal Communications Services Networks," IEEE Transactions on
19 Vehicular Technology, Vol. 43, August 1994. One of ordinary skill in the art
20 would have been motivated to combine or modify the Giniger Patent in this manner
21 for the reasons explained in Section IV.A and also because the Giniger Patent and
22 the above-referenced prior art from Appendix O are all directed towards wireless
23 location determining and/or reporting technology.

24 As described above, one of ordinary skill in the art would not have limited
25 himself to a specific technology when making modifications or improvements to
26 the Giniger Patent, but would have modified the Giniger Patent with concepts from
27 other wireless location and/or wireless communication solutions of the time. This
28 would have been a result of ordinary innovation, ordinary skill, and common sense

1 and would have been obvious to try and predictable. Moreover, design incentives
2 and other market forces would have prompted those endeavors.

3 **5. U.S. Patent No. 6,486,794 (Calistro et al.)**

4 U.S. Patent No. 6,486,794 to Calistro et al., entitled “Method of Locating a
5 Subscriber Unit Within the Coverage Area of a Communication System,” issued on
6 November 26, 2002 (the “Calistro Patent”). The Calistro Patent is entitled to a
7 priority date at least as early as February 26, 1996. The Calistro Patent qualifies as
8 prior art under at least 35 U.S.C. § 102(e). The chart attached as Exhibit 21
9 provides examples of where the Calistro Patent discloses, either expressly or
10 inherently, each element of the Asserted Claims, thereby anticipating those claims.

11 To the extent Plaintiff asserts that the Calistro Patent does not anticipate the
12 Asserted Claims, it would have been obvious to combine or modify the Calistro
13 Patent with concepts from other prior art such as, for example, other prior art
14 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
15 invalid, because all of that prior art relates to wireless location and/or wireless
16 communication technology.

17 For example, it would have been obvious to combine or modify the Calistro
18 Patent to use the methods of authentication described by the prior art from
19 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
20 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
21 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
22 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
23 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
24 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
25 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
26 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
27 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
28 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent

1 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
2 Considerations for Scalable, Secure, Mobile Computing with Location
3 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
4 It would also have been obvious to combine or modify the Calistro Patent to use the
5 methods of authentication described by the prior art from Appendix R, including,
6 for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to
7 Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent Publication
8 No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567 to
9 Spaargaren. One of ordinary skill in the art would have been motivated to combine
10 or modify the Calistro Patent in this manner for the reasons explained in Section
11 IV.A and also because the Calistro Patent and the above-referenced prior art from
12 Appendices D and R are all directed towards wireless location determining and/or
13 reporting technology.

14 As another example, it would have been obvious to combine or modify the
15 Calistro Patent to have a mobile unit verify when it last provided its location
16 information to a communication system, as described by the prior art from
17 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
18 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.
19 2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No.
20 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958
21 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art
22 would have been motivated to combine or modify the Calistro Patent in this manner
23 for the reasons explained in Section IV.A and also because the Calistro Patent and
24 the above-referenced prior art from Appendix M are all directed towards wireless
25 location determining and/or reporting technology.

26 As another example, it would have been obvious to combine or modify the
27 Calistro Patent to determine when the location information of a mobile unit has not
28 been established for a period of time, as described by the prior art from Appendix

1 N, including, for example, U.S. Patent No. 8,023,958 to Wang; U.S. Patent
2 Publication No. 2003/0101225 to Han; W.O Publication No. 2001/031965 to
3 Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to
4 Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 6,199,045 to Giniger
5 et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang
6 et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin,
7 “Determining the User Locations for Personal Communications Services
8 Networks,” IEEE Transactions on Vehicular Technology, Vol. 43, August 1994.
9 One of ordinary skill in the art would have been motivated to combine or modify
10 the Calistro Patent in this manner for the reasons explained in Section IV.A and
11 also because the Calistro Patent and the above-referenced prior art from Appendix
12 N are all directed towards wireless location determining and/or reporting
13 technology.

14 As another example, it would have been obvious to combine or modify the
15 Calistro Patent to use a time stamp to verify that a predetermined period of time has
16 lapsed since the location information of a mobile unit was last updated, as described
17 by the prior art from Appendix O, including, for example, U.S. Patent No.
18 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.
19 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; U.S.
20 Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang et al.; U.S.
21 Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin, “Determining the User
22 Locations for Personal Communications Services Networks,” IEEE Transactions on
23 Vehicular Technology, Vol. 43, August 1994. One of ordinary skill in the art
24 would have been motivated to combine or modify the Calistro Patent in this manner
25 for the reasons explained in Section IV.A and also because the Calistro Patent and
26 the above-referenced prior art from Appendix O are all directed towards wireless
27 location determining and/or reporting technology.

1 As another example, it would have been obvious to combine or modify the
2 Calistro Patent to request that the location information of a mobile unit be
3 established after verifying when the mobile unit last provided its location
4 information, as described by the prior art from Appendix P, including, for example,
5 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
6 U.S. Patent No. 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster
7 et al.; U.S. Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567
8 A3R4 to Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al.
9 One of ordinary skill in the art would have been motivated to combine or modify
10 the Calistro Patent in this manner for the reasons explained in Section IV.A and
11 also because the Calistro Patent and the above-referenced prior art from Appendix
12 P are all directed towards wireless location determining and/or reporting
13 technology.

14 As described above, one of ordinary skill in the art would not have limited
15 himself to a specific technology when making modifications or improvements to
16 the Calistro Patent, but would have modified the Calistro Patent with concepts from
17 other wireless location and/or wireless communication solutions of the time. This
18 would have been a result of ordinary innovation, ordinary skill, and common sense
19 and would have been obvious to try and predictable. Moreover, design incentives
20 and other market forces would have prompted those endeavors.

21 **6. The Lin Article**

22 The publication by Yi-Bing Lin, entitled “Determining the User Locations
23 for Personal Communications Services Networks,” was published in August of
24 1994 in volume 43 of the IEEE Transactions on Vehicular Technology (the “Lin
25 Article”). The Lin Article qualifies as prior art under at least 35 U.S.C. §§ 102(a)
26 and (b). The chart attached as Exhibit 22 provides examples of where the Lin
27 Article discloses, either expressly or inherently, each element of the Asserted
28 Claims, thereby anticipating those claims.

1 To the extent Plaintiff asserts that the Lin Article does not anticipate the
2 Asserted Claims, it would have been obvious to combine or modify the Lin Article
3 with concepts from other prior art such as, for example, other prior art identified in
4 Section IV and/or Appendices A-R, to render the Asserted Claims invalid, because
5 all of that prior art relates to wireless location and/or wireless communication
6 technology.

7 For example, it would have been obvious to combine or modify the Lin
8 Article to receive a request for location information, as described by the prior art
9 from Appendix A, including, for example, U.S. Patent No. 5,963,866 to Palamara et
10 al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S. Patent No. 6,442,391 to
11 Johansson et al.; U.S. Patent No. 5,946,626 to Foadare et al.; U.S. Patent No.
12 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to Singer et al.; U.S. Patent
13 No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S.
14 Patent No. 6,360,102 to Havinis et al.; U.S. Patent No. 5,625,668 to Loomis et al.;
15 U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent No. 6,199,045 to Giniger
16 et al.; U.S. Application Serial No. 08/162,522 to Theimer et al.; International PCT
17 Application No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No.
18 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural Considerations
19 for Scalable, Secure, Mobile Computing with Location Information," IEEE
20 Distributed Computing Systems Conference, June 21-24, 1994. One of ordinary
21 skill in the art would have been motivated to combine or modify the Lin Article in
22 this manner for the reasons explained in Section IV.A and also because the Lin
23 Article and the above-referenced prior art from Appendix A are all directed towards
24 wireless location determining and/or reporting technology.

25 As another example, it would have been obvious to combine or modify the
26 Lin Article to use the methods of authentication described by the prior art from
27 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
28 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.

1 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
2 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
3 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
4 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
5 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
6 6,360,102 to Havinis et al.; U.S. Patent No. 6,486,794 to Calistro, et al.; U.S. Patent
7 No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S.
8 Application Serial No. 08/162,522 to Theimer et al.; International PCT Application
9 No. PCT/US97/11656 to Boltz et al.; JP Patent Publication No. 6189359A to
10 Michihiro; and Mike Spreitzer et al., “Architectural Considerations for Scalable,
11 Secure, Mobile Computing with Location Information,” IEEE Distributed
12 Computing Systems Conference, June 21-24, 1994. It would also have been
13 obvious to combine or modify the Lin Article to use the methods of authentication
14 described by the prior art from Appendix R, including, for example, U.S. Patent
15 No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to Wang, W.O Publication No.
16 2001/031965 to Willehadson, U.S. Patent Publication No. 2009/0098857 to De
17 Atley, and W.O. Publication No. 2002/017567 to Spaargaren. One of ordinary
18 skill in the art would have been motivated to combine or modify the Lin Article in
19 this manner for the reasons explained in Section IV.A and also because the Lin
20 Article and the above-referenced prior art from Appendices D and R are all directed
21 towards wireless location determining and/or reporting technology.

22 As another example, it would have been obvious to combine or modify the
23 Lin Article to have a mobile unit verify when it last provided its location
24 information to a communication system, as described by the prior art from
25 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
26 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.
27 2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No.
28 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958

1 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art
2 would have been motivated to combine or modify the Lin Article in this manner for
3 the reasons explained in Section IV.A and also because the Lin Article and the
4 above-referenced prior art from Appendix M are all directed towards wireless
5 location determining and/or reporting technology.

6 As another example, it would have been obvious to combine or modify the
7 Lin Article to request that the location information of a mobile unit be established
8 after verifying when the mobile unit last provided its location information, as
9 described by the prior art from Appendix P, including, for example, U.S. Patent No.
10 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No.
11 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; U.S.
12 Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567 A3R4 to
13 Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al. One of
14 ordinary skill in the art would have been motivated to combine or modify the Lin
15 Article in this manner for the reasons explained in Section IV.A and also because
16 the Lin Article and the above-referenced prior art from Appendix P are all directed
17 towards wireless location determining and/or reporting technology.

18 As described above, one of ordinary skill in the art would not have limited
19 himself to a specific technology when making modifications or improvements to
20 the Lin Article, but would have modified the Lin Article with concepts from other
21 wireless location and/or wireless communication solutions of the time. This would
22 have been a result of ordinary innovation, ordinary skill, and common sense and
23 would have been obvious to try and predictable. Moreover, design incentives and
24 other market forces would have prompted those endeavors.

25 **7. U.S. Patent No. 7,277,714 (Mikan et al.)**

26 U.S. Patent No. 7,277,714 to Mikan et al., entitled “Location Caching and
27 Extrapolation Based on Speed,” issued on October 2, 2007 (the “Mikan Patent I”).
28 The Mikan Patent I is entitled to a priority date at least as early as August 3, 2005.

1 The Mikan Patent I qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (e).
2 The chart attached as Exhibit 29 provides examples of where the Mikan Patent I
3 discloses, either expressly or inherently, each element of the Asserted Claims,
4 thereby anticipating those claims.

5 To the extent Plaintiff asserts that the Mikan Patent I does not anticipate the
6 Asserted Claims, it would have been obvious to combine or modify the Mikan
7 Patent I with concepts from other prior art such as, for example, other prior art
8 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
9 invalid, because all of that prior art relates to wireless location and/or wireless
10 communication technology.

11 For example, it would have been obvious to combine or modify the Mikan
12 Patent I to use the methods of authentication described by the prior art from
13 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
14 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
15 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
16 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
17 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
18 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
19 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
20 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
21 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
22 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
23 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
24 Considerations for Scalable, Secure, Mobile Computing with Location
25 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
26 It would also have been obvious to combine or modify the Mikan Patent I to use the
27 methods of authentication described by the prior art from Appendix R, including,
28 for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No. 8,023,958 to

1 Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent Publication
2 No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567 to
3 Spaargaren. One of ordinary skill in the art would have been motivated to
4 combine or modify the Mikan Patent I in this manner for the reasons explained in
5 Section IV.A and also because the Mikan Patent I and the above-referenced prior
6 art from Appendices D and R are all directed towards wireless location determining
7 and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 Mikan Patent I to request that the location information of a mobile unit be
10 established after verifying when the mobile unit last provided its location
11 information, as described by the prior art from Appendix P, including, for example,
12 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
13 U.S. Patent No. 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster
14 et al.; U.S. Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567
15 A3R4 to Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al.
16 One of ordinary skill in the art would have been motivated to combine or modify
17 the Mikan Patent I in this manner for the reasons explained in Section IV.A and
18 also because the Mikan Patent I and the above-referenced prior art from Appendix
19 P are all directed towards wireless location determining and/or reporting
20 technology.

21 As described above, one of ordinary skill in the art would not have limited
22 himself to a specific technology when making modifications or improvements to
23 the Mikan Patent I, but would have modified the Mikan Patent I with concepts from
24 other wireless location and/or wireless communication solutions of the time. This
25 would have been a result of ordinary innovation, ordinary skill, and common sense
26 and would have been obvious to try and predictable. Moreover, design incentives
27 and other market forces would have prompted those endeavors.

1 **8. U.S. Patent No. 7,970,415 (Mikan et al.)**

2 U.S. Patent No. 7,970,415 to Mikan et al., entitled “Location Caching with
3 Expiration Based on Location,” issued on June 28, 2011 (the “Mikan Patent II”).
4 The Mikan Patent II is entitled to a priority date at least as early as August 3, 2005.
5 The Mikan Patent II qualifies as prior art under at least 35 U.S.C. §§ 102(a) and (e).
6 The chart attached as Exhibit 30 provides examples of where the Mikan Patent II
7 discloses, either expressly or inherently, each element of the Asserted Claims,
8 thereby anticipating those claims.

9 To the extent Plaintiff asserts that the Mikan Patent II does not anticipate the
10 Asserted Claims, it would have been obvious to combine or modify the Mikan
11 Patent II with concepts from other prior art such as, for example, other prior art
12 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
13 invalid, because all of that prior art relates to wireless location and/or wireless
14 communication technology.

15 For example, it would have been obvious to combine or modify the Mikan
16 Patent II to use the methods of authentication described by the prior art from
17 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
18 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
19 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
20 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
21 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
22 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
23 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
24 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
25 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
26 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
27 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
28 Considerations for Scalable, Secure, Mobile Computing with Location

1 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
2 It would also have been obvious to combine or modify the Mikan Patent II to use
3 the methods of authentication described by the prior art from Appendix R,
4 including, for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No.
5 8,023,958 to Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent
6 Publication No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567
7 to Spaargaren. One of ordinary skill in the art would have been motivated to
8 combine or modify the Mikan Patent II in this manner for the reasons explained in
9 Section IV.A and also because the Mikan Patent II and the above-referenced prior
10 art from Appendices D and R are all directed towards wireless location determining
11 and/or reporting technology.

12 As another example, it would have been obvious to combine or modify the
13 Mikan Patent II to request that the location information of a mobile unit be
14 established after verifying when the mobile unit last provided its location
15 information, as described by the prior art from Appendix P, including, for example,
16 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
17 U.S. Patent No. 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster
18 et al.; U.S. Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567
19 A3R4 to Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al.
20 One of ordinary skill in the art would have been motivated to combine or modify
21 the Mikan Patent II in this manner for the reasons explained in Section IV.A and
22 also because the Mikan Patent II and the above-referenced prior art from Appendix
23 P are all directed towards wireless location determining and/or reporting
24 technology.

25 As described above, one of ordinary skill in the art would not have limited
26 himself to a specific technology when making modifications or improvements to
27 the Mikan Patent II, but would have modified the Mikan Patent II with concepts
28 from other wireless location and/or wireless communication solutions of the time.

1 This would have been a result of ordinary innovation, ordinary skill, and common
 2 sense and would have been obvious to try and predictable. Moreover, design
 3 incentives and other market forces would have prompted those endeavors.

4 **9. U.S. Patent No. 7,643,834 (Ioppe et al.)**

5 U.S. Patent No. 7,643,834 to Ioppe et al., entitled “System for Providing
 6 Alert-Based Services to Mobile Stations in a Wireless Communications Network,”
 7 issued on January 5, 2010 (the “Ioppe Patent”). The Ioppe Patent is entitled to a
 8 priority date at least as early as July 16, 2001. The Ioppe Patent qualifies as prior
 9 art under at least 35 U.S.C. §§ 102(a), (b), and (e). The chart attached as Exhibit 31
 10 provides examples of where the Ioppe Patent discloses, either expressly or
 11 inherently, each element of the Asserted Claims, thereby anticipating those claims.

12 To the extent Plaintiff asserts that the Ioppe Patent does not anticipate the
 13 Asserted Claims, it would have been obvious to combine or modify the Ioppe
 14 Patent with concepts from other prior art such as, for example, other prior art
 15 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
 16 invalid, because all of that prior art relates to wireless location and/or wireless
 17 communication technology.

18 For example, it would have been obvious to combine or modify the Ioppe
 19 Patent to use the methods of authentication described by the prior art from
 20 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
 21 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
 22 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
 23 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
 24 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
 25 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
 26 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
 27 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
 28 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et

1 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
2 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
3 Considerations for Scalable, Secure, Mobile Computing with Location
4 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
5 It would also have been obvious to combine or modify the Ioppe Patent to use the
6 methods of authentication described by the prior art from Appendix R, including,
7 for example, U.S. Patent No. 8,023,958 to Wang, W.O. Publication No.
8 2001/031965 to Willehadson, U.S. Patent Publication No. 2009/0098857 to De
9 Atley, and W.O. Publication No. 2002/017567 to Spaargaren. One of ordinary
10 skill in the art would have been motivated to combine or modify the Ioppe Patent in
11 this manner for the reasons explained in Section IV.A and also because the Ioppe
12 Patent and the above-referenced prior art from Appendices D and R are all directed
13 towards wireless location determining and/or reporting technology.

14 As another example, it would have been obvious to combine or modify the
15 Ioppe Patent to request that the location information of a mobile unit be established
16 after verifying when the mobile unit last provided its location information, as
17 described by the prior art from Appendix P, including, for example, U.S. Patent No.
18 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No.
19 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; U.S.
20 Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567 A3R4 to
21 Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al. One of
22 ordinary skill in the art would have been motivated to combine or modify the Ioppe
23 Patent in this manner for the reasons explained in Section IV.A and also because
24 the Ioppe Patent and the above-referenced prior art from Appendix P are all
25 directed towards wireless location determining and/or reporting technology.

26 As described above, one of ordinary skill in the art would not have limited
27 himself to a specific technology when making modifications or improvements to
28 the Ioppe Patent, but would have modified the Ioppe Patent with concepts from

1 other wireless location and/or wireless communication solutions of the time. This
2 would have been a result of ordinary innovation, ordinary skill, and common sense
3 and would have been obvious to try and predictable. Moreover, design incentives
4 and other market forces would have prompted those endeavors.

5 **10. U.S. Patent No. 8,023,958 (Wang et al.)**

6 U.S. Patent No. 8,023,958 to Wang et al., entitled “User Plane-Based
7 Location Services (LCS) System, Method and Apparatus,” issued on September 20,
8 2011 (the “Wang Patent”). The Wang Patent is entitled to a priority date at least as
9 early as March 5, 2003. The Wang Patent qualifies as prior art under at least 35
10 U.S.C. §§ 102(a), (b), and (e). The chart attached as Exhibit 32 provides examples
11 of where the Wang Patent discloses, either expressly or inherently, each element of
12 the Asserted Claims, thereby anticipating those claims.

13 To the extent Plaintiff asserts that the Wang Patent does not anticipate the
14 Asserted Claims, it would have been obvious to combine or modify the Wang
15 Patent with concepts from other prior art such as, for example, other prior art
16 identified in Section IV and/or Appendices A-R, to render the Asserted Claims
17 invalid, because all of that prior art relates to wireless location and/or wireless
18 communication technology.

19 For example, it would have been obvious to combine or modify the Wang
20 Patent to use the methods of authentication described by the prior art from
21 Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
22 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
23 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
24 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
25 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
26 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
27 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
28 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent

1 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
2 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
3 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
4 Considerations for Scalable, Secure, Mobile Computing with Location
5 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
6 It would also have been obvious to combine or modify the Wang Patent to use the
7 methods of authentication described by the prior art from Appendix R, including,
8 for example, U.S. Patent No. 7,643,834 to Ioppe, W.O. Publication No.
9 2001/031965 to Willehadson, U.S. Patent Publication No. 2009/0098857 to De
10 Atley, and W.O. Publication No. 2002/017567 to Spaargaren. One of ordinary skill
11 in the art would have been motivated to combine or modify the Wang Patent in this
12 manner for the reasons explained in Section IV.A and also because the Wang Patent
13 and the above-referenced prior art from Appendices D and R are all directed
14 towards wireless location determining and/or reporting technology.

15 As another example, it would have been obvious to combine or modify the
16 Wang Patent to use a time stamp to verify that a predetermined period of time has
17 lapsed since the location information of a mobile unit was last updated, as described
18 by the prior art from Appendix O, including, for example, U.S. Patent No.
19 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.
20 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; U.S.
21 Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang et al.; U.S.
22 Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin, “Determining the User
23 Locations for Personal Communications Services Networks,” IEEE Transactions on
24 Vehicular Technology, Vol. 43, August 1994. One of ordinary skill in the art
25 would have been motivated to combine or modify the Wang Patent in this manner
26 for the reasons explained in Section IV.A and also because the Wang Patent and the
27 above-referenced prior art from Appendix O are all directed towards wireless
28 location determining and/or reporting technology.

1 As described above, one of ordinary skill in the art would not have limited
2 himself to a specific technology when making modifications or improvements to
3 the Wang Patent, but would have modified the Wang Patent with concepts from
4 other wireless location and/or wireless communication solutions of the time. This
5 would have been a result of ordinary innovation, ordinary skill, and common sense
6 and would have been obvious to try and predictable. Moreover, design incentives
7 and other market forces would have prompted those endeavors.

8 **11. W.O. Publication No. 2002/017567 (Spaargaren et al.)**

9 W.O. Publication No. 2002/017567 A3R4 to Spaargaren entitled “Wireless
10 Communications System with Location-Dependent Services” (the “Spaargaren
11 Publication”). The Spaargaren Publication is entitled to a priority date at least as
12 early as August 28, 2001. The Spaargaren Publication qualifies as prior art under at
13 least 35 U.S.C. §§ 102(a) and (b). The chart attached as Exhibit 33 provides
14 examples of where the Spaargaren Publication discloses, either expressly or
15 inherently, each element of the Asserted Claims, thereby anticipating those claims.

16 To the extent Plaintiff asserts that the Spaargaren Publication does not
17 anticipate the Asserted Claims, it would have been obvious to combine or modify
18 the Spaargaren Publication with concepts from other prior art such as, for example,
19 other prior art identified in Section IV and/or Appendices A-R, to render the
20 Asserted Claims invalid, because all of that prior art relates to wireless location
21 and/or wireless communication technology.

22 For example, it would have been obvious to combine or modify the
23 Spaargaren Publication to use the methods of authentication described by the prior
24 art from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
25 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
26 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
27 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
28 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to

1 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
2 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
3 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
4 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
5 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
6 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
7 Considerations for Scalable, Secure, Mobile Computing with Location
8 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
9 It would also have been obvious to combine or modify the Spaargaren Publication
10 to use the methods of authentication described by the prior art from Appendix R,
11 including, for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No.
12 8,023,958 to Wang, W.O Publication No. 2001/031965 to Willehadson, and U.S.
13 Patent Publication No. 2009/0098857 to De Atley. One of ordinary skill in the art
14 would have been motivated to combine or modify the Spaargaren Publication in
15 this manner for the reasons explained in Section IV.A and also because the
16 Spaargaren Publication and the above-referenced prior art from Appendices D and
17 R are all directed towards wireless location determining and/or reporting
18 technology.

19 As another example, it would have been obvious to combine or modify the
20 Spaargaren Publication to have a mobile unit verify when it last provided its
21 location information to a communication system, as described by the prior art from
22 Appendix M, including, for example, U.S. Patent Publication No. 2003/0101225 to
23 Han; U.S. Patent Publication No. 2009/0098857 to De Atley; W.O Publication No.
24 2001/031965 to Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No.
25 7,277,714 to Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 8,023,958
26 to Wang; U.S. Patent No. 5,365,451 to Wang et al. One of ordinary skill in the art
27 would have been motivated to combine or modify the Spaargaren Publication in
28 this manner for the reasons explained in Section IV.A and also because the

1 Spaargaren Publication and the above-referenced prior art from Appendix M are all
2 directed towards wireless location determining and/or reporting technology.

3 As another example, it would have been obvious to combine or modify the
4 Spaargaren Publication to determine when the location information of a mobile unit
5 has not been established for a period of time, as described by the prior art from
6 Appendix N, including, for example, U.S. Patent No. 8,023,958 to Wang; U.S.
7 Patent Publication No. 2003/0101225 to Han; W.O Publication No. 2001/031965 to
8 Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to
9 Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 6,199,045 to Giniger
10 et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang
11 et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin,
12 “Determining the User Locations for Personal Communications Services
13 Networks,” IEEE Transactions on Vehicular Technology, Vol. 43, August 1994.
14 One of ordinary skill in the art would have been motivated to combine or modify
15 the Spaargaren Publication in this manner for the reasons explained in Section IV.A
16 and also because the Spaargaren Publication and the above-referenced prior art
17 from Appendix N are all directed towards wireless location determining and/or
18 reporting technology.

19 As another example, it would have been obvious to combine or modify the
20 Spaargaren Publication to use a time stamp to verify that a predetermined period of
21 time has lapsed since the location information of a mobile unit was last updated, as
22 described by the prior art from Appendix O, including, for example, U.S. Patent
23 No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.
24 7,643,834 to Ioppe; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No.
25 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; and Yi-
26 Bing Lin, “Determining the User Locations for Personal Communications Services
27 Networks,” IEEE Transactions on Vehicular Technology, Vol. 43, August 1994.
28 One of ordinary skill in the art would have been motivated to combine or modify

1 the Spaargaren Publication in this manner for the reasons explained in Section IV.A
2 and also because the Spaargaren Publication and the above-referenced prior art
3 from Appendix O are all directed towards wireless location determining and/or
4 reporting technology.

5 As described above, one of ordinary skill in the art would not have limited
6 himself to a specific technology when making modifications or improvements to
7 the Spaargaren Publication, but would have modified the Spaargaren Publication
8 with concepts from other wireless location and/or wireless communication
9 solutions of the time. This would have been a result of ordinary innovation,
10 ordinary skill, and common sense and would have been obvious to try and
11 predictable. Moreover, design incentives and other market forces would have
12 prompted those endeavors.

13 **12. W.O. Publication No. 2001/031965 (Willehadson et al.)**

14 W.O. Publication 2001/031965 by Willehadson et al., entitled “Multiple
15 Source Location Method” (the “Willehadson Publication”). The Willehadson
16 Publication is entitled to a priority date at least as early as October 30, 2000. The
17 Willehadson Publication qualifies as prior art under at least 35 U.S.C. §§ 102(a)
18 and (b). The chart attached as Exhibit 34 provides examples of where the
19 Willehadson Publication discloses, either expressly or inherently, each element of
20 the Asserted Claims, thereby anticipating those claims.

21 To the extent Plaintiff asserts that the Willehadson Publication does not
22 anticipate the Asserted Claims, it would have been obvious to combine or modify
23 the Willehadson Publication with concepts from other prior art such as, for
24 example, other prior art identified in Section IV and/or Appendices A-R, to render
25 the Asserted Claims invalid, because all of that prior art relates to wireless location
26 and/or wireless communication technology.

27 For example, it would have been obvious to combine or modify the
28 Willehadson Publication to use the methods of authentication described by the prior

1 art from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
2 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
3 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
4 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
5 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
6 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
7 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
8 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
9 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
10 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
11 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
12 Considerations for Scalable, Secure, Mobile Computing with Location
13 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
14 It would also have been obvious to combine or modify the Willehadson Publication
15 to use the methods of authentication described by the prior art from Appendix R,
16 including, for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No.
17 8,023,958 to Wang, U.S. Patent Publication No. 2009/0098857 to De Atley, and
18 W.O. Publication No. 2002/017567 to Spaargaren. One of ordinary skill in the art
19 would have been motivated to combine or modify the Willehadson Publication in
20 this manner for the reasons explained in Section IV.A and also because the
21 Willehadson Publication and the above-referenced prior art from Appendices D and
22 R are all directed towards wireless location determining and/or reporting
23 technology.

24 As another example, it would have been obvious to combine or modify the
25 Willehadson Publication to use a time stamp to verify that a predetermined period
26 of time has lapsed since the location information of a mobile unit was last updated,
27 as described by the prior art from Appendix O, including, for example, U.S. Patent
28 No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.

1 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; U.S.
2 Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang et al.; U.S.
3 Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin, "Determining the User
4 Locations for Personal Communications Services Networks," IEEE Transactions on
5 Vehicular Technology, Vol. 43, August 1994. One of ordinary skill in the art
6 would have been motivated to combine or modify the Willehadson Publication in
7 this manner for the reasons explained in Section IV.A and also because the
8 Willehadson Publication and the above-referenced prior art from Appendix O are
9 all directed towards wireless location determining and/or reporting technology.

10 As another example, it would have been obvious to combine or modify the
11 Willehadson Publication to request that the location information of a mobile unit be
12 established after verifying when the mobile unit last provided its location
13 information, as described by the prior art from Appendix P, including, for example,
14 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
15 U.S. Patent No. 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster
16 et al.; U.S. Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567
17 A3R4 to Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al.
18 One of ordinary skill in the art would have been motivated to combine or modify
19 the Willehadson Publication in this manner for the reasons explained in Section
20 IV.A and also because the Willehadson Publication and the above-referenced prior
21 art from Appendix P are all directed towards wireless location determining and/or
22 reporting technology.

23 As described above, one of ordinary skill in the art would not have limited
24 himself to a specific technology when making modifications or improvements to
25 the Willehadson Publication, but would have modified the Willehadson Publication
26 with concepts from other wireless location and/or wireless communication
27 solutions of the time. This would have been a result of ordinary innovation,
28 ordinary skill, and common sense and would have been obvious to try and

1 predictable. Moreover, design incentives and other market forces would have
2 prompted those endeavors.

3 **13. U.S. Publication No. 2003/0101225 (Han et al.)**

4 U.S. Patent Publication No. 2003/0101225 of Han et al., entitled “Method
5 and System for Providing Location-Based Event Service,” (the “Han Patent
6 Publication”). The Han Patent Publication is entitled to a priority date at least as
7 early as November 27, 2001. The Han Patent Publication qualifies as prior art
8 under at least 35 U.S.C. § 102(a), (b), and (e). The chart attached as Exhibit 35
9 provides examples of where the Han Patent Publication discloses, either expressly
10 or inherently, each element of the Asserted Claims, thereby anticipating those
11 claims.

12 To the extent Plaintiff asserts that the Han Patent Publication does not
13 anticipate the Asserted Claims, it would have been obvious to combine or modify
14 the Han Patent Publication with concepts from other prior art such as, for example,
15 other prior art identified in Section IV and/or Appendices A-R, to render the
16 Asserted Claims invalid, because all of that prior art relates to wireless location
17 and/or wireless communication technology.

18 For example, it would have been obvious to combine or modify the Han
19 Patent Publication to use the methods of authentication described by the prior art
20 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
21 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
22 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
23 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et
24 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
25 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
26 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
27 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
28 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et

1 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
2 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., “Architectural
3 Considerations for Scalable, Secure, Mobile Computing with Location
4 Information,” IEEE Distributed Computing Systems Conference, June 21-24, 1994.
5 It would also have been obvious to combine or modify the Han Patent Publication
6 to use the methods of authentication described by the prior art from Appendix R,
7 including, for example, U.S. Patent No. 7,643,834 to Ioppe, U.S. Patent No.
8 8,023,958 to Wang, W.O Publication No. 2001/031965 to Willehadson, U.S. Patent
9 Publication No. 2009/0098857 to De Atley, and W.O. Publication No. 2002/017567
10 to Spaargaren. One of ordinary skill in the art would have been motivated to
11 combine or modify the Han Patent Publication in this manner for the reasons
12 explained in Section IV.A and also because the Han Patent Publication and the
13 above-referenced prior art from Appendices D and R are all directed towards
14 wireless location determining and/or reporting technology.

15 As another example, it would have been obvious to combine or modify the
16 Han Patent Publication to use a time stamp to verify that a predetermined period of
17 time has lapsed since the location information of a mobile unit was last updated, as
18 described by the prior art from Appendix O, including, for example, U.S. Patent
19 No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S. Patent No.
20 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; U.S.
21 Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang et al.; U.S.
22 Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin, “Determining the User
23 Locations for Personal Communications Services Networks,” IEEE Transactions on
24 Vehicular Technology, Vol. 43, August 1994. One of ordinary skill in the art
25 would have been motivated to combine or modify the Han Patent Publication in this
26 manner for the reasons explained in Section IV.A and also because the Han Patent
27 Publication and the above-referenced prior art from Appendix O are all directed
28 towards wireless location determining and/or reporting technology.

1 As described above, one of ordinary skill in the art would not have limited
2 himself to a specific technology when making modifications or improvements to
3 the Han Patent Publication, but would have modified the Han Patent Publication
4 with concepts from other wireless location and/or wireless communication
5 solutions of the time. This would have been a result of ordinary innovation,
6 ordinary skill, and common sense and would have been obvious to try and
7 predictable. Moreover, design incentives and other market forces would have
8 prompted those endeavors.

9 **14. U.S. Publication No. 2009/0098857 (De Atley et al.)**

10 U.S. Patent Publication No. 2009/0098857 by De Atley entitled “Securely
11 Locating a Device,” (the “De Atley Patent Publication”). The De Atley Patent
12 Publication is entitled to a priority date at least as early as October 10, 2007. The
13 De Atley Patent Publication qualifies as prior art under at least 35 U.S.C. § 102(e).
14 The chart attached as Exhibit 36 provides examples of where the De Atley Patent
15 Publication discloses, either expressly or inherently, each element of the Asserted
16 Claims, thereby anticipating those claims.

17 To the extent Plaintiff asserts that the De Atley Patent Publication does not
18 anticipate the Asserted Claims, it would have been obvious to combine or modify
19 the De Atley Patent Publication with concepts from other prior art such as, for
20 example, other prior art identified in Section IV and/or Appendices A-R, to render
21 the Asserted Claims invalid, because all of that prior art relates to wireless location
22 and/or wireless communication technology.

23 For example, it would have been obvious to combine or modify the De Atley
24 Patent Publication to use the methods of authentication described by the prior art
25 from Appendix D, including, for example, The ATIS Solution; U.S. Patent No.
26 5,950,137 to Kim; U.S. Patent No. 6,169,902 to Kawamoto; U.S. Patent No.
27 5,963,866 to Palamara et al.; U.S. Patent No. 6,138,003 to Kingdon et al.; U.S.
28 Patent No. 6,442,391 to Johansson et al.; U.S. Patent No. 5,946,626 to Foladare et

1 al.; U.S. Patent No. 5,731,785 to Lemelson et al.; U.S. Patent No. 5,485,163 to
2 Singer et al.; U.S. Patent No. 6,091,957 to Larkins et al.; U.S. Patent No. 5,564,070
3 to Want et al.; U.S. Patent No. 5,493,692 to Theimer et al.; U.S. Patent No.
4 6,360,102 to Havinis et al.; U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent
5 No. 5,774,802 to Tell et al.; U.S. Application Serial No. 08/162,522 to Theimer et
6 al.; International PCT Application No. PCT/US97/11656 to Boltz et al.; JP Patent
7 Publication No. 6189359A to Michihiro; and Mike Spreitzer et al., "Architectural
8 Considerations for Scalable, Secure, Mobile Computing with Location
9 Information," IEEE Distributed Computing Systems Conference, June 21-24, 1994.
10 It would also have been obvious to combine or modify the De Atley Patent
11 Publication to use the methods of authentication described by the prior art from
12 Appendix R, including, for example, U.S. Patent No. 7,643,834 to Ioppe, U.S.
13 Patent No. 8,023,958 to Wang, W.O Publication No. 2001/031965 to Willehadson,
14 and W.O. Publication No. 2002/017567 to Spaargaren. One of ordinary skill in the
15 art would have been motivated to combine or modify the De Atley Patent
16 Publication in this manner for the reasons explained in Section IV.A and also
17 because the De Atley Patent Publication and the above-referenced prior art from
18 Appendices D and R are all directed towards wireless location determining and/or
19 reporting technology.

20 As another example, it would have been obvious to combine or modify the
21 De Atley Patent Publication to determine when the location information of a mobile
22 unit has not been established for a period of time, as described by the prior art from
23 Appendix N, including, for example, U.S. Patent No. 8,023,958 to Wang; U.S.
24 Patent Publication No. 2003/0101225 to Han; W.O Publication No. 2001/031965 to
25 Willehadson; U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to
26 Mikan; U.S. Patent No. 7,643,834 to Ioppe; U.S. Patent No. 6,199,045 to Giniger
27 et al.; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to Wang
28 et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin,

1 “Determining the User Locations for Personal Communications Services
2 Networks,” IEEE Transactions on Vehicular Technology, Vol. 43, August 1994.
3 One of ordinary skill in the art would have been motivated to combine or modify
4 the De Atley Patent Publication in this manner for the reasons explained in Section
5 IV.A and also because the De Atley Patent Publication and the above-referenced
6 prior art from Appendix N are all directed towards wireless location determining
7 and/or reporting technology.

8 As another example, it would have been obvious to combine or modify the
9 De Atley Patent Publication to use a time stamp to verify that a predetermined
10 period of time has lapsed since the location information of a mobile unit was last
11 updated, as described by the prior art from Appendix O, including, for example,
12 U.S. Patent No. 7,970,415 to Mikan; U.S. Patent No. 7,277,714 to Mikan; U.S.
13 Patent No. 7,643,834 to Ioppe; W.O. Publication No. 2002/017567 A3R4 to
14 Spaargaren; U.S. Patent No. 5,774,802 to Tell et al.; U.S. Patent No. 5,365,451 to
15 Wang et al.; U.S. Patent No. 5,732,387 to Armbruster et al.; and Yi-Bing Lin,
16 “Determining the User Locations for Personal Communications Services
17 Networks,” IEEE Transactions on Vehicular Technology, Vol. 43, August 1994.
18 One of ordinary skill in the art would have been motivated to combine or modify
19 the De Atley Patent Publication in this manner for the reasons explained in Section
20 IV.A and also because the De Atley Patent Publication and the above-referenced
21 prior art from Appendix O are all directed towards wireless location determining
22 and/or reporting technology.

23 As another example, it would have been obvious to combine or modify the
24 De Atley Patent Publication to request that the location information of a mobile unit
25 be established after verifying when the mobile unit last provided its location
26 information, as described by the prior art from Appendix P, including, for example,
27 U.S. Patent No. 6,199,045 to Giniger et al.; U.S. Patent No. 5,774,802 to Tell et al.;
28 U.S. Patent No. 5,365,451 to Wang et al.; U.S. Patent No. 5,732,387 to Armbruster

et al.; U.S. Patent No. 8,023,958 to Wang et al.; W.O. Publication No. 2002/017567 A3R4 to Spaargaren; and U.S. Patent Publication No. 2003/0101225 to Han et al. One of ordinary skill in the art would have been motivated to combine or modify the De Atley Patent Publication in this manner for the reasons explained in Section IV.A and also because the De Atley Patent Publication and the above-referenced prior art from Appendix P are all directed towards wireless location determining and/or reporting technology.

As described above, one of ordinary skill in the art would not have limited himself to a specific technology when making modifications or improvements to the De Atley Patent Publication, but would have modified the De Atley Patent Publication with concepts from other wireless location and/or wireless communication solutions of the time. This would have been a result of ordinary innovation, ordinary skill, and common sense and would have been obvious to try and predictable. Moreover, design incentives and other market forces would have prompted those endeavors.

V. THE ASSERTED CLAIMS ARE INVALID UNDER 35 U.S.C. § 112 [P.R. 3-3(D)]

Pursuant to Patent Rule 3-3(d), Defendants provide the following grounds of invalidity of the Asserted Claims based on indefiniteness under 35 U.S.C. § 112, ¶ 2, and for lack of written description and/or enablement under 35 U.S.C. § 112, ¶ 1. Defendants reserve the right to supplement, modify, or otherwise amend their Amended Invalidity Contentions under 35 U.S.C. § 112, ¶¶ 1 and 2 based on a change in Plaintiff's apparent claim constructions, on Plaintiff's claim construction arguments, or on the Court's claim construction ruling when issued.

A. 35 U.S.C. § 112, ¶ 2: Indefiniteness

The Asserted Claims are each invalid for failure to comply with the definiteness requirement of 35 U.S.C. § 112, ¶ 2. The Asserted Claims fail to

1 particularly point out and distinctly claim the subject matter which the Applicants
2 regarded as their alleged invention such that one skilled in the relevant art would be
3 reasonably apprised of the bounds of the Asserted Claims when read in light of the
4 specification of the Asserted Patents. To the extent the below discussion focuses on
5 any asserted independent claims, the deficiencies which render the independent
6 claims invalid under § 112, ¶ 1 also infect and thus invalidate the claims depending
7 therefrom.

8 The phrase “receiving authorization at the network to block or divulge the
9 location of information the remote receiving unit from the remote receiving unit,”
10 as recited by Claim 13 of the ‘461 Patent, renders Claim 13 indefinite under 35
11 U.S.C. § 112, ¶ 2 because the scope of the phrase “the location of information the
12 remote receiving unit” is insolubly ambiguous.

13 The phrase “wherein the step of exposing the location disclosure information
14 (iii) may also include forwarding the specified location disclosure information to a
15 second communication node,” as recited by Claim 19 of the ‘461 Patent, renders
16 Claim 19 indefinite under 35 U.S.C. § 112, ¶ 2 because it is insolubly ambiguous
17 whether the step of “forwarding the specified location disclosure information” is an
18 optional or mandatory step required by Claim 19.

19 The phrase “wherein the step of querying at the network for information
20 disclosure instruction for the mobile remote unit may further include transmitting
21 the identification of the source of request to the mobile remote receiving unit and
22 obtaining information disclosure instruction from the mobile remote receiving
23 unit,” as recited by Claim 12 of the ‘461 Patent, renders Claim 12 indefinite under
24 35 U.S.C. § 112, ¶ 2 because it is insolubly ambiguous whether the step of
25 “transmitting the identification of the source of request to the mobile remote
26 receiving unit and obtaining information disclosure instruction from the mobile
27 remote receiving unit” is an optional or mandatory step required by Claim 12.

1 The phrase “at the network,” as recited by Claims 1, 6, 11, 12, 13, 18, 19, 25,
2 and 28 of the ‘461 Patent, renders these claims indefinite under 35 U.S.C. § 112, ¶
3 2 because the scope of the phrase “at the network” is insolubly ambiguous.

4 The phrase “continuously tracked,” as recited by Claims 1 and 6 of the ‘461
5 Patent, renders these claims indefinite under 35 U.S.C. § 112, ¶ 2 because the scope
6 of the phrase “continuously tracked” is insolubly ambiguous.

7 The phrase “wherein the location of the mobile is continuously tracked
8 within the system,” as recited by Claim 6 of the ‘461 Patent, renders Claim 6
9 indefinite under 35 U.S.C. § 112, ¶ 2 because the scope of the phrase “the mobile”
10 is insolubly ambiguous.

11 The terms “pre-authorized,” “preauthorized,” and “preauthorizing,” as recited
12 by Claims 1, 6, 11, 18, 25, and 28 of the ‘461 Patent, renders these claims indefinite
13 under 35 U.S.C. § 112, ¶ 2 because the scope of these terms is insolubly
14 ambiguous.

15 The phrase “exposing the location disclosure information (iii) at the
16 network,” as recited by Claim 18 of the ‘461 Patent, renders Claim 18 indefinite
17 under 35 U.S.C. § 112, ¶ 2 because it is insolubly ambiguous as to how the location
18 disclosure information is “exposed.”

19 The phrase “said establish mobile remote location information” and “said
20 establish mobile remote unit location information,” as recited by Claim 25 of the
21 ‘461 Patent, render Claim 25 indefinite under 35 U.S.C. § 112, ¶ 2 because the
22 scope of these phrases is insolubly ambiguous.

23 The phrase “receiving a request to provide the location information of the
24 mobile remote unit to an authorized resource,” as recited by Claim 1 of the ‘273
25 Patent, renders Claim 1 indefinite under 35 U.S.C. § 112, ¶ 2 because the scope of
26 the phrase “authorized resource” is insolubly ambiguous.

27 The phrase “determining that the location information of said mobile remote
28 unit has not been established within said communication system for a time after

1 said verification of (a),” as recited by Claim 1 of the ‘273 Patent, renders Claim 1
 2 indefinite under 35 U.S.C. § 112, ¶ 2 because it is insolubly ambiguous whether the
 3 phrase “after said verification of (a)” refers to when the “determining” step is
 4 performed or refers to the time that the location information has not been
 5 established within the communication system.

6 The phrase “requesting that the location information of said mobile remote
 7 unit be established after said verification of (a) within said communication system,”
 8 as recited by Claim 1 of the ‘273 Patent, renders Claim 1 indefinite under 35 U.S.C.
 9 § 112, ¶ 2 because it is insolubly ambiguous whether the “requesting” step may be
 10 performed after step (a) but before step (b) or whether it may only be performed
 11 after step (b).

12 The following phrases render the Asserted Claims in which those phrases
 13 appear indefinite under 35 U.S.C. § 112, ¶ 2 due to the lack of a proper antecedent
 14 basis:

- 15 • “the source of the request,” as recited by Claim 13 of the ‘461 Patent
- 16 • “the location information,” as recited by Claims 6, 13, 18, and 25 of
 17 the ‘461 Patent
- 18 • “the location,” as recited by Claims 6 and 18 of the ‘461 Patent
- 19 • “the identity,” as recited by Claim 28 of the ‘461 Patent

20 Claim 6 of the ‘461 Patent is indefinite under 35 U.S.C. § 112, ¶ 2 for
 21 reciting both apparatus and process limitations and therefore impermissibly mixing
 22 two statutory classes of patentable subject matter. For example, Claim 6 of the
 23 ‘461 Patent, which is directed towards a “communication system,” recites the
 24 method step of “preauthorizing some of the communication resources to be able to
 25 obtain the location of the mobile remote unit at a given time wherein the location of
 26 the mobile is continuously tracked within the system.”

27 Claim 10 of the ‘461 Patent is indefinite under 35 U.S.C. § 112 ¶ 2 because
 28 the specification of the ‘461 Patent fails to identify structure corresponding to the

1 “means for detecting an absence of communication with the remote receiving unit”
2 recited by Claim 10.

3 As such, the Asserted Claims fail to particularly point out and distinctly
4 claim the subject matter which the Applicants regarded as their alleged invention,
5 rendering the Asserted Claims invalid for failure to comply with the definiteness
6 requirement of 35 U.S.C. § 112, ¶ 2.

7 **B. 35 U.S.C. § 112, ¶ 1: Insufficient Written Description**

8 The Asserted Claims are each invalid for failure to comply with the written
9 description requirement under 35 U.S.C. § 112, ¶ 1. To the extent the below
10 discussion focuses on any asserted independent claims, the deficiencies which
11 render the independent claims invalid under § 112, ¶ 1 also infect and thus
12 invalidate the claims depending therefrom.

13 The specification of the Asserted Patents does not contain written description
14 support at least for the following terms and/or phrases, rendering the claims of the
15 Asserted Patents in which those terms and/or phrases appear invalid under § 112, ¶
16 1:

- 17 • “continuously tracked,” as recited by Claims 1 and 6 of the ‘461 Patent
- 18 • “location disclosure instruction,” as recited by Claim 6 of the ‘461
19 Patent
- 20 • “location information disclosure instruction,” as recited by Claim 11 of
21 the ‘461 Patent
- 22 • “location disclosure information,” as recited by Claims 18 and 19 of
23 the ‘461 Patent
- 24 • “location access field,” as recited by Claim 28 of the ‘461 Patent
- 25 • “pre-authorized,” “preauthorized,” and “preauthorizing,” as recited by
26 Claims 1, 6, 11, 18, 25, and 28 of the ‘461 Patent
- 27 • “authorization,” as recited by Claim 13 of the ‘461 Patent
- 28 • “the control unit able to utilize said location disclosure instruction for
the mobile remote unit to allow the provision of mobile remote unit
location information to certain network resources of step (iii) while

1 blocking such information from being divulged to other network
 2 resources (iii) at the given time,” as recited by Claim 6 of the ‘461
 3 Patent

- 4 • “the mobile remote unit able to deny the provision of said establish
 5 mobile remote unit location information to a pre-authorized
 6 communication resource selected from the network of pre-authorized
 7 communication resources during a period time when access to mobile
 8 remote unit location information has been granted to another
 9 preauthorized communication resource at the network,” as recited by
 10 Claim 25 of the ‘461 Patent
- 11 • “wherein at least a profile is maintained by the system, said profile
 12 containing the identity of a preauthorized resource, identity of the first
 13 communication resource and a location access field indicating whether
 14 said preauthorized resource identified in the profile should be
 15 allowed/disallowed to access the location information of the first
 16 communication resource identified in said profile,” as recited by Claim
 17 28 of the ‘461 Patent
- 18 • “the system able to use the location access field of a first profile to
 19 deny the location information of the first communication resource to
 20 the preauthorized resource identified in said first profile while
 21 allowing another preauthorized resource identified in a second profile
 22 to access the location information of the first communication resource
 23 during the time that access is being denied to the preauthorized
 24 resource identified in said first profile,” as recited by Claim 28 of the
 25 ‘461 Patent
- 26 • “means for detecting an absence of communication with the remote
 27 receiving unit,” as recited by Claim 10 of the ‘461 Patent
- 28 • “selecting a pre-authorized communication resource from the said
 network of pre-authorized communication resources,” as recited by
 Claim 18 of the ‘461 Patent
- “exposing the location disclosure information (iii) at the network,” as
 recited by Claim 18 of the ‘461 Patent
- “forwarding the specified location disclosure information to a second
 communication node at the network,” as recited by Claim 19 of the
 ‘461 Patent
- “a mobile remote receiving unit located at a first network node,” as
 recited by Claim 6 of the ‘461 Patent

- 1 • “transmitting the identification of the source of request to the mobile
2 remote receiving unit,” as recited by Claim 12 of the ‘461 Patent
- 3 • “transmitting the request and the identification of the source of the
4 request by the network to the remote receiving unit,” as recited by
5 Claim 13 of the ‘461 Patent
- 6 • “a pool of signal transmitting and receiving units from the network
7 some of which are pre-authorized to be able to access the location of
8 the mobile remote unit at the network for a time,” as recited by Claim
9 1 of the ‘461 Patent
- 10 • “wherein the location of the mobile remote unit is continuously
11 tracked during the time that the location is being denied to said
12 network resource selected from said pool of preauthorized signal
13 transmitting and receiving units,” as recited by Claim 1 of the ‘461
14 Patent
- 15 • “preauthorizing some of the communication resources to be able to
16 obtain the location of the mobile remote unit at a given time wherein
17 the location of the mobile is continuously tracked within the system,”
18 as recited by Claim 6 of the ‘461 Patent
- 19 • “querying for mobile remote unit location disclosure instruction at the
20 network,” as recited by Claim 6 of the ‘461 Patent
- 21 • “the control unit able to utilize said location disclosure instruction for
22 the mobile remote unit to allow the provision of mobile remote unit
23 location information to certain network resources of step (iii) while
24 blocking such information from being divulged to other network
25 resources (iii) at the given time,” as recited by Claim 6 of the ‘461
26 Patent
- 27 • “identifying the source of request,” as recited by Claims 11 and 13 of
28 the ‘461 Patent
- “verifying that the source of request is pre-authorized to access
location information of the mobile remote receiving unit at the
network,” as recited by Claim 11 of the ‘461 Patent
- “querying at the network for location information disclosure
instruction for the mobile remote receiving unit,” as recited by Claim
11 of the ‘461 Patent
- “using said instruction (v) to allow or block mobile remote receiving
unit location information to the pre-authorized source of request,” as
recited by Claim 11 of the ‘461 Patent

- 1 • “receiving authorization at the network to block or divulge the location
2 of information the remote receiving unit from the remote receiving
3 unit,” as recited by Claim 13 of the ‘461 Patent
- 4 • “specifying by way of a location disclosure information for the mobile
5 remote unit, whether the pre-authorized communication resource of
6 step (ii) should be disallowed or allowed to access the location
7 information of the remote unit at the network,” as recited by Claim 18
8 of the ‘461 Patent
- 9 • “using for a time the exposed location disclosure information at the
10 network to limit access to the location information of the remote unit
11 to the pre-authorized communication resource of step (ii),” as recited
12 by Claim 18 of the ‘461 Patent
- 13 • “a network of communication resources also associated with the
14 system and some of which are pre-authorized to obtain said establish
15 mobile remote location information from the system,” as recited by
16 Claim 25 of the ‘461 Patent
- 17 • “the mobile remote unit being able to accept or deny the provision of
18 its location information to the requestor,” as recited by Claim 27 of the
19 ‘461 Patent
- 20 • “authorized resource,” as recited by Claim 1 of the ‘273 Patent
- 21 • “verifying when the mobile remote unit last provided its location
22 information to said communication system,” as recited by Claim 1 of
23 the ‘273 Patent
- 24 • “determining that the location information of said mobile remote unit
25 has not been established within said communication system for a time
26 after said verification of (a),” as recited by Claim 1 of the ‘273 Patent
- 27 • “(i) maintaining a time stamp of when the location information of said
28 mobile remote unit was last updated within said communication
system,” as recited by Claim 1 of the ‘273 Patent
- “using said time stamp to verify that a predetermined time interval has
passed since the location information of said mobile remote unit was
last updated within said communication system and returning a result
of the verification to said communication system,” as recited by Claim
1 of the ‘273 Patent

As such, the specification of the Asserted Patents does not contain written description support for the Asserted Claims, rendering the Asserted Claims invalid

1 for failure to comply with the written description requirement under 35 U.S.C. §
 2 112, ¶ 1. In addition to the lack of written description support for the specific terms
 3 and/or phrases identified above, the specification fails to convey to those skilled in
 4 the art that the inventors were in possession as of the filing date of the particular
 5 combinations of limitations recited in the asserted claims. Accordingly, the
 6 Asserted Claims are invalid under 35 U.S.C. § 112, ¶ 1.

7 **C. 35 U.S.C. § 112, ¶ 1: Lack of Enablement**

8 The Asserted Claims are each invalid for failure to comply with the
 9 enablement requirement under 35 U.S.C. § 112, ¶ 1. The specification of the
 10 Asserted Patents fails to provide an enabling disclosure of the Asserted Claims to
 11 the full extent of the claim scope as apparently asserted and applied in Plaintiff's
 12 Infringement Contentions. To the extent the below discussion focuses on any
 13 asserted independent claims, the deficiencies which render the independent claims
 14 invalid under § 112, ¶ 1 also infect and thus invalidate the claims depending
 15 therefrom.

16 The specification of the Asserted Patents fails to provide an enabling
 17 disclosure of the Asserted Claims with respect to the following terms and/or
 18 phrases, rendering the claims of the Asserted Patents in which those phrases appear
 19 invalid for failing to comply with the enablement requirement under 35 U.S.C. §
 20 112, ¶ 1:

- 21 • "continuously tracked," as recited by Claims 1 and 6 of the '461 Patent
- 22 • "location disclosure instruction," as recited by Claim 6 of the '461
- 23 Patent
- 24 • "location information disclosure instruction," as recited by Claim 11 of
- 25 the '461 Patent
- 26 • "location disclosure information," as recited by Claims 18 and 19 of
- 27 the '461 Patent
- 28 • "location access field," as recited by Claim 28 of the '461 Patent

- 1 • “pre-authorized,” “preauthorized,” and “preauthorizing,” as recited by
- 2 Claims 1, 6, 11, 18, 25, and 28 of the ‘461 Patent
- 3 • “authorization,” as recited by Claim 13 of the ‘461 Patent
- 4 • “the control unit able to utilize said location disclosure instruction for
- 5 the mobile remote unit to allow the provision of mobile remote unit
- 6 location information to certain network resources of step (iii) while
- 7 blocking such information from being divulged to other network
- 8 resources (iii) at the given time,” as recited by Claim 6 of the ‘461
- 9 Patent
- 10 • “the mobile remote unit able to deny the provision of said establish
- 11 mobile remote unit location information to a pre-authorized
- 12 communication resource selected from the network of pre-authorized
- 13 communication resources during a period time when access to mobile
- 14 remote unit location information has been granted to another
- 15 preauthorized communication resource at the network,” as recited by
- 16 Claim 25 of the ‘461 Patent
- 17 • “wherein at least a profile is maintained by the system, said profile
- 18 containing the identity of a preauthorized resource, identity of the first
- 19 communication resource and a location access field indicating whether
- 20 said preauthorized resource identified in the profile should be
- 21 allowed/disallowed to access the location information of the first
- 22 communication resource identified in said profile,” as recited by Claim
- 23 28 of the ‘461 Patent
- 24 • “the system able to use the location access field of a first profile to
- 25 deny the location information of the first communication resource to
- 26 the preauthorized resource identified in said first profile while
- 27 allowing another preauthorized resource identified in a second profile
- 28 to access the location information of the first communication resource
- during the time that access is being denied to the preauthorized
- resource identified in said first profile,” as recited by Claim 28 of the
- ‘461 Patent
- “means for detecting an absence of communication with the remote
- receiving unit,” as recited by Claim 10 of the ‘461 Patent
- “selecting a pre-authorized communication resource from the said
- network of pre-authorized communication resources,” as recited by
- Claim 18 of the ‘461 Patent
- “exposing the location disclosure information (iii) at the network,” as
- recited by Claim 18 of the ‘461 Patent

- 1 • “forwarding the specified location disclosure information to a second
2 communication node at the network,” as recited by Claim 19 of the
3 ‘461 Patent
- 4 • “a mobile remote receiving unit located at a first network node,” as
5 recited by Claim 6 of the ‘461 Patent
- 6 • “transmitting the identification of the source of request to the mobile
7 remote receiving unit,” as recited by Claim 12 of the ‘461 Patent
- 8 • “transmitting the request and the identification of the source of the
9 request by the network to the remote receiving unit,” as recited by
10 Claim 13 of the ‘461 Patent
- 11 • “a pool of signal transmitting and receiving units from the network
12 some of which are pre-authorized to be able to access the location of
13 the mobile remote unit at the network for a time,” as recited by Claim
14 1 of the ‘461 Patent
- 15 • “wherein the location of the mobile remote unit is continuously
16 tracked during the time that the location is being denied to said
17 network resource selected from said pool of preauthorized signal
18 transmitting and receiving units,” as recited by Claim 1 of the ‘461
19 Patent
- 20 • “preauthorizing some of the communication resources to be able to
21 obtain the location of the mobile remote unit at a given time wherein
22 the location of the mobile is continuously tracked within the system,”
23 as recited by Claim 6 of the ‘461 Patent
- 24 • “querying for mobile remote unit location disclosure instruction at the
25 network,” as recited by Claim 6 of the ‘461 Patent
- 26 • “the control unit able to utilize said location disclosure instruction for
27 the mobile remote unit to allow the provision of mobile remote unit
28 location information to certain network resources of step (iii) while
blocking such information from being divulged to other network
resources (iii) at the given time,” as recited by Claim 6 of the ‘461
Patent
- “identifying the source of request,” as recited by Claims 11 and 13 of
the ‘461 Patent
- “verifying that the source of request is pre-authorized to access
location information of the mobile remote receiving unit at the
network,” as recited by Claim 11 of the ‘461 Patent

- 1 • “querying at the network for location information disclosure
2 instruction for the mobile remote receiving unit,” as recited by Claim
3 11 of the ‘461 Patent
- 4 • “using said instruction (v) to allow or block mobile remote receiving
5 unit location information to the pre-authorized source of request,” as
6 recited by Claim 11 of the ‘461 Patent
- 7 • “receiving authorization at the network to block or divulge the location
8 of information the remote receiving unit from the remote receiving
9 unit,” as recited by Claim 13 of the ‘461 Patent
- 10 • “specifying by way of a location disclosure information for the mobile
11 remote unit, whether the pre-authorized communication resource of
12 step (ii) should be disallowed or allowed to access the location
13 information of the remote unit at the network,” as recited by Claim 18
14 of the ‘461 Patent
- 15 • “using for a time the exposed location disclosure information at the
16 network to limit access to the location information of the remote unit
17 to the pre-authorized communication resource of step (ii),” as recited
18 by Claim 18 of the ‘461 Patent
- 19 • “a network of communication resources also associated with the
20 system and some of which are pre-authorized to obtain said establish
21 mobile remote location information from the system,” as recited by
22 Claim 25 of the ‘461 Patent
- 23 • “the mobile remote unit being able to accept or deny the provision of
24 its location information to the requestor,” as recited by Claim 27 of the
25 ‘461 Patent
- 26 • “authorized resource,” as recited by Claim 1 of the ‘273 Patent
- 27 • “verifying when the mobile remote unit last provided its location
28 information to said communication system,” as recited by Claim 1 of
the ‘273 Patent
- “determining that the location information of said mobile remote unit
has not been established within said communication system for a time
after said verification of (a),” as recited by Claim 1 of the ‘273 Patent
- “(i) maintaining a time stamp of when the location information of said
mobile remote unit was last updated within said communication
system,” as recited by Claim 1 of the ‘273 Patent
- “using said time stamp to verify that a predetermined time interval has
passed since the location information of said mobile remote unit was

1 last updated within said communication system and returning a result
 2 of the verification to said communication system,” as recited by Claim
 3 1 of the ‘273 Patent

4 As such, the specification of the Asserted Patents fails to disclose in full,
 5 clear, concise, and exact terms as to enable any person skilled in the art to which it
 6 pertains how to make and use the claimed inventions of the Asserted Claims,
 7 rendering the Asserted Claims invalid for failure to comply with the enablement
 8 requirement under 35 U.S.C. § 112, ¶ 1.

9 **D. Additional Invalidity Positions Under 35 U.S.C. § 112**

10 Precise identification of all of the bases upon which the Asserted Claims are
 11 invalid under 35 U.S.C. § 112 are likely to be revealed only after further
 12 developments in the case, including fact and expert discovery. Defendants reserve
 13 the right to supplement, modify, or otherwise amend these Amended Invalidity
 14 Contentions to include any invalidity arguments under 35 U.S.C. § 112 that become
 15 apparent in view of any relevant facts and information revealed during fact or
 16 expert discovery.

17 **VI. ADDITIONAL INVALIDITY CONTENTIONS**

18 Without conceding whether Patent Rule 3-3 requires the disclosure of
 19 Invalidity Contentions that are not expressly discussed in the rule, Defendants
 20 provide notice below of additional invalidity defenses under 35 U.S.C. § 101.
 21 Notwithstanding these voluntary disclosures, Defendants reserve the right to assert
 22 any additional invalidity defenses that are not expressly referenced in Patent Rule
 23 3-3.

24 **A. Invalidity Under 35 U.S.C. § 101**

25 Claim 6 of the ‘461 Patent is invalid under 35 U.S.C. § 101 because, as set
 26 forth above in Section V.A, which is incorporated as if fully set forth herein, Claim
 27 6 recites both apparatus and process limitations, and therefore impermissibly mixes
 28 two statutory classes of patentable subject matter permitted by 35 U.S.C. § 101,

1 which provides that “[w]hoever invents or discovers any new and useful process,
2 machine, manufacture, or composition of matter, or any new and useful
3 improvement thereof, may obtain a patent therefor.” The combination of apparatus
4 and process limitations renders Claim 6 invalid under § 101 (in addition to being
5 invalid under § 112, ¶ 2 for indefiniteness, as described above in Section V.A).

6 **B. Additional Invalidity Positions**

7 Precise identification of all of the bases upon which the Asserted Claims are
8 invalid and/or unenforceable, including such based as improper inventorship and
9 the judicially-created non-statutory obviousness-type double patenting doctrine, are
10 likely to be revealed only after further developments in the case, including fact and
11 expert discovery. Defendants reserve the right to supplement, modify, or otherwise
12 amend these Amended Invalidity Contentions to address any additional invalidity
13 arguments that become apparent in view of any relevant facts and information
14 revealed during discovery or to otherwise seek to invalidate the Asserted Claims on
15 any basis that is not required to be disclosed under Patent Rule 3-3.